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In the Supreme Court of the United States

OCTOBER TERM, 1932

No. 27.

NOV 12 1932

CHARLES ELMORE CROPLEY
CLERK

THE TENNESSEE ELECTRIC POWER COMPANY,
FRANKLIN POWER & LIGHT COMPANY,
MEMPHIS POWER & LIGHT COMPANY,
SOUTHERN TENNESSEE POWER COMPANY,
BIRMINGHAM ELECTRIC COMPANY,
MISSISSIPPI POWER COMPANY,
APPALACHIAN ELECTRIC POWER COMPANY,
CAROLINA POWER & LIGHT COMPANY,
ALABAMA POWER COMPANY,
KENTUCKY & WEST VIRGINIA POWER COMPANY, INC.,
KNOXPORT UTILITIES, INCORPORATED,
WEST TENNESSEE POWER & LIGHT COMPANY,
MISSISSIPPI POWER & LIGHT COMPANY,
EAST TENNESSEE LIGHT & POWER COMPANY,
TENNESSEE EASTERN ELECTRIC COMPANY,

Plaintiffs-Appellants,

vs.

TENNESSEE VALLEY AUTHORITY, and
ARTHUR E. MORGAN, HARCOURT A. MORGAN and
DAVID E. LILIENTHAL, each individually and as an Executive
Officer and Director of Tennessee Valley Authority,

Defendants-Appellees.

ON DIRECT APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TENNESSEE.

REPLY BRIEF FOR APPELLANTS.

JOHN C. WEADOCK,
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CHARLES M. SEYMOUR,
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Counsel for Appellants.

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ABBREVIATIONS USED IN REFERENCES.

Fdg.—Finding of Fact made by the trial court.

Add. Fdg.—Additional Finding of Fact made by Judge Gore.

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REPLY BRIEF FOR APPELLANTS.

I.

PRELIMINARY MATTERS RAISED BY APPELLEES.

1. Change in Parties Appellant and Its Significance.

In our original brief we stated the fact and the circumstances of the dismissal of the Georgia Power Company as a party below and of Tennessee Public Service Company and Holston River Electric Company as parties appellant. (Appellants' Br. 4.) The appellees state in their brief that since appellants' main brief was filed, the appellants Kentucky-Tennessee Light & Power Company and Memphis Power & Light Company have applied, or will apply before argument, for leave to withdraw as parties to this suit and to this appeal without prejudice to the rights of the remaining appellants. The circumstances of the withdrawal of these parties from this appeal are of great significance and are inadequately stated by appellees. (Appellees' Br. 5, 110.)

TVA is the sole purchaser of all of the facilities of Holston River Electric Company, which served Hawkins and Hamblen Counties, Tennessee, (see map, Comp. Ex. 29*) and TVA now owns and operates the distribution systems in one incorporated town and seven villages in these Counties. In general, the distribution facilities of the Tennessee Public Service Company located in Knoxville were conveyed to that city and the distribution facilities outside the corporate limits of the city were conveyed to TVA. (See map, Comp. Ex. 27*.) An examination of the maps (Comp. Exs. 327*, 27*, 29*) discloses these further areas now served by TVA, and that these rapidly expanding TVA power operations have now been extended to the edge of the market areas of appellants Kingsport Utilities, Incorporated, Carolina Power & Light Company, Tennessee Eastern Electric Company and Appalachian Electric Power Company.

Under two contracts all of the distribution facilities of Kentucky-Tennessee Light & Power Company in the service area, shown on the map (Comp. Ex. 327*) lying in Kentucky and Tennessee immediately north of Norris, are to be conveyed to the City of Clarksville "or its nominee" and all transmission lines, substations and similar property are to be conveyed to TVA. All other electric facilities used by this company in supplying electricity to the public in the remaining area served by it in Tennessee (except in one isolated municipality in which negotiations for sale to the municipality are pending) are to be conveyed to the Cities of Paris, Huntington and McKenzie, Tennessee, the incorporated town of Ridgely, Tennessee and Weakley County, Tennessee, or to TVA under a contract reciting that TVA and these political subdivisions "are sometimes herein collectively designated as 'the purchaser.'" TVA purchased directly transmission lines, substations and like facilities and also "all electrical distribution facilities located within and without the limits of the following com-

munities: Puryear, Whitlock, Cottage Grove, McKenzie, Henry, Huntington, Trezevant, Atwood, McLemoresville, Dyer, Rutherford, Kenton, Mason Hall, Bradford, Rives, Troy, Obion, Trimble, Newbern, Tiptonville, Wynneburg and Ridgely, Tennessee." An examination of the maps (Comp. Ex. 327*, 205*) discloses the scope of this extension of TVA operations. Both of these contracts provide that such property as is ostensibly to be transferred to the cities, towns and counties shall be transferable to their "nominee," but do not disclose whether the nominee may be TVA.

In addition TVA, and certain cities and towns, have made an agreement for the purchase of the electric properties of the West Tennessee Power & Light Company and we are informed that TVA and the City of Memphis are negotiating for the purchase of the electric properties of the Memphis Power & Light Company. The extent of the service area and market involved in this expansion of TVA power operations likewise appears from an examination of the map. (Comp. Ex. 327*.)

At the date of the trial TVA reported no contracts with any of these towns, cities or counties except the Cities of Knoxville, Memphis and Paris. (Fdg. 210, R. 646.) At the time of the trial, Memphis, Knoxville, Clarksville, Paris and Newbern had been allotted loans and grants by PWA for the construction of duplicate distribution systems to distribute TVA power. (R. 3327.) Whether PWA allotments had been made to other of the towns and cities involved during the intervening period is unknown to these appellants.

It is plain that these utilities are not suddenly retiring voluntarily from the businesses which they have created over a period of many years. It is plain that these appellants have retired from their businesses because their destruction threatened to become a *fait accompli* before this

appeal could be heard and determined. This has all taken place while the TVA power system is only fractionally developed. It has taken place in service areas where appellees assert no threat from TVA exists because at the date of trial the distribution of TVA power, although being rapidly extended, had not yet reached the market areas of certain of the appellants and had not yet inflicted the damages which this suit was brought to prevent. (Appellees' Br. 175-177; see pp. 101-103, *infra*.) It has brought the area of actual TVA operations to the doorstep of every appellant in whose service area the distribution of TVA power is not yet an accomplished fact. (See map, Comp. Ex. 327*.) Nothing could more eloquently illustrate the truth of appellants' position that TVA is actively engaged in taking over the electric business within transmission distance of its partially completed and constantly expanding power system, and that unless relief is secured from this Court the appellants speedily will be driven out of business by TVA.

2. Prayer for Relief. The appellees, after an inadequate summary of the Bill, assert that appellants, among other things, sought a "sweeping injunction" against the "national power policy" and against the construction of "dams in the Tennessee River and its tributaries." (Appellees' Br. 6.) No such relief was sought in the prayer. (R. 67-71.) The appellants have stated the relief which they seek and to which they believe they are entitled on this record at pp. 248-249 of their main brief.

3. Statutory Construction. The appellees assert that no question of statutory construction is involved. (Appellees' Br. 2-3.) While it is true that the scope of the TVA Act is so broad with respect to the development of the power resources of the Tennessee River and its tributaries and the establishment of a great federally owned

and operated electric utility system that it is difficult to conceive of any actions of that character which would be in excess of the terms of the statute, it is not true that no questions of statutory construction are raised in the record. The appellants do assert that the appellees are violating the statute (1) by selling electricity below subsidized cost (TVA Act, Sec. 14); (2) by confederating with the Public Works Administration, Rural Electrification Administration and Civil Works Administration to take over the businesses of appellants or to force appellants to sell electric distribution systems at distress prices on penalty of duplication with loans and gifts of federal funds; and (3) by engaging in a systematic campaign of misrepresentation, slander and libel of the businesses of the appellants for the purpose, and with the necessary effect, of destroying and appropriating their going businesses. Since the trial court excluded practically all evidence offered to support these charges and denied appellants the benefit of process to procure other evidence for the same purpose, they have been discussed only in connection with the errors of the trial court in excluding evidence. (Appellants' Br. 214-247.)

4. Procedure Below. Appellees seek to excuse the failure of the trial court to afford adequate time for preparation and submission of requested findings and its denial of an opportunity to examine and point out the errors in requested findings submitted by the appellees by asserting that the court had stated some time in advance of the close of the case that it would follow such a course. (Appellees' Br. 7-11.) Laying to one side the practical impossibility of preparing findings while counsel are fully occupied with a complicated trial, it is difficult to understand how proper findings could be prepared in advance of the presentation of the evidence. And if that impossibility were disregarded, it would not excuse the failure to afford an

opportunity to examine requested findings of appellees and point out their erroneous character, nor the subsequent *ex parte* acceptance of briefs thereafter filed by appellees criticizing and attacking the suggested findings filed by the appellants. This one-sided deviation from the announced procedure of the court only aggravated its prejudicial character. Cf. *Morgan v. United States*, 304 U. S. 1, 19.

5. Effect of the Findings. The appellees contend that findings, whether made unanimously or rejected by one of the three members of the trial court, are unassailable. (Appellees' Br. 11.) The effect of the findings will be more appropriately considered in our discussion of the contentions of appellees to which particular findings are claimed to apply. However, the rule in cases where findings have been previously sustained by two courts (*Alabama Power Co. v. Ickes*, 302 U. S. 464) has no application here. Here the appeal is direct to this Court. The findings have not been reviewed by any appellate court and, as we shall hereinafter point out more particularly, they fail to touch the controlling issues of fact, they are based upon erroneous conceptions of law, they are in some instances bare conclusions unsupported by findings of essential underlying facts, they are in some instances unsupported by any evidence and in other instances against the clear weight of the evidence. It is a settled rule that in equity cases the first reviewing court will examine the evidence and set aside findings of the trial court where they are against the weight of the evidence, based upon erroneous interpretations of documentary evidence, dependent upon the persuasive effect of facts not turning on the credibility of witnesses or based upon an erroneous conception of law. *Adamson v. Gilliland*, 242 U. S. 350, 352-3; *Laurson v. Lowe*, 46 F. (2d) 303, 304; *Uihlein v. General Electric Co.*, 47 F. (2d) 997, 1002-4; *Ins. Co. v.*

Simons, 60 F. (2d) 30, 32. The reviewing court will also disregard incomplete findings and bare conclusions unsupported by findings of essential underlying facts. *Interstate Circuit v. United States*, 304 U. S. 55.

In addition, it should be observed that the findings upon which the appellees principally rely in their brief are of a character and were made in a manner which is aptly described in *Process Engineers v. Container Corp.*, 70 F. (2d) 487, cert. den. 293 U. S. 588, where the court said:

"It is urged that the court's findings should be sustained because supported by some evidence. The weakness of this argument lies in the fact that *the findings were not made by the court, but are the work of industrious counsel* who combined his argument and a partisan and unfair statement of facts into one and called it, 'Findings of Fact.' *It is difficult to distinguish these findings from the brief of counsel for appellee.*

Such so-called findings do not help an appellate court. They reflect the views of counsel who submitted them and detract from the force and effect which are ordinarily given to findings made by the trial judge. When the abuse is aggravated (and the objectionable practice is growing), the assistance to the appellate court, which findings when carefully made by the trial court afford, is lost, and it becomes necessary for us to study the evidence as though no findings had been made by the District Court." (loc. cit. 489.)¹

Moreover, it will be observed that the majority of the findings chiefly relied upon by the appellees were rejected or modified by Judge Gore, who made findings of evidentiary facts (R. 669-713) which squarely contradict the bare, and frequently confusing, conclusions upon which appellees rely. Under such circumstances, it is futile to say

¹ Unless otherwise noted, throughout this brief, emphasis has been supplied.

that a few bare conclusions, not supported by adequate findings of evidentiary facts and against the clear weight of the evidence, should be determinative of questions involving the very foundations of our constitutional system—that findings of such a character should be given conclusive effect where finality of fact may be finality of law. If such were the rule, our constitutional system would depend wholly upon the industry, judgment or prejudice of a trial judge and the function of this Court in preserving our constitutional system and the constitutional liberties of the people would be substantially destroyed.

II.

THE APPELLEES WHOLLY FAIL TO SHOW THAT THE WATER POWER WILL BE INCIDENTALLY CREATED IN THE DISCHARGE OF ANY CONSTITUTIONAL FUNCTION, AND IN EFFECT CONCEDE THAT IT IS SEPARATELY AND PURPOSEFULLY CREATED UNDER THE CLAIMED RIGHT TO DEVELOP ALL OF THE ECONOMIC RESOURCES OF INLAND WATERS, NO MATTER HOW UNRELATED TO ANY FEDERAL FUNCTION. (Answering Appellees' Br. 12-53; 72-106.)

Stated most favorably to appellees, the TVA Unified Plan involves three objectives, that is, some navigation improvement, some flood control and the creation of a vast quantity of water power. At least one of these objectives, the creation of water power, is not within the field of federal power except to the extent that it is incidentally and necessarily created by the operation of structures built for, and having a real, substantial and *bona fide* relation to, the discharge of some constitutional function. That the creation of water power is a separate and independent objective, and not merely an incidental result, of the TVA Unified Plan is conceded by appellees:

"If the improvement of navigation and control of floods *were the only ends in view*, appellants would not be here to object." (Appellees' Br. 104.)

An examination of the facts and applicable law makes plain that this concession is not improvident.

The issue is not, as appellees chiefly argue, whether the TVA Unified Plan includes any navigation or flood control facilities. The precise questions involved are (1) whether the water power is being, or will be, incidentally and necessarily created by the operation of structures (a) having a real, substantial and *bona fide* relation to the improvement of navigation, (b) having a real, substantial and *bona fide* relation to flood control so far as flood control falls within the field of federal power, or (c) in a *bona fide* and constitutional exercise of the war power; and (2) whether even if the structures creating the water power are in some degree related to navigation, flood control or national defense, the creation of the water power under the facts disclosed in this record is not an attempt to achieve a prohibited end in the guise of exercising a granted power.

We do not contend that the TVA Unified Plan includes no navigation or flood control features, although they are a very minor part of that Plan. We do contend that the main stream projects are primarily power reservoirs with incidental navigation facilities upon which flood control reservoirs (creating no firm water power) are superimposed and that the TVA tributary projects are large power reservoirs without any incidental navigation facilities, and without any relation to navigation, upon *some* of which relatively small flood control reservoirs are superimposed. We also contend that the gross disparity between the size, type and cost of the structures for the creation of water power (as distinguished from facilities for converting water power into electricity) and the size, type and cost of such naviga-

tion and flood control facilities as are included in the TVA Unified Plan emphasizes not only the lack of relation between the creation of water power and the functions of navigation or flood control, but also the attempt to achieve a prohibited end in the guise of exercising granted powers. (Appellants' Br. 115-121.)

The appellees do not meet these issues and attempt to obscure and screen them by intermingling a discussion of navigation, flood control and national defense in inextricable confusion. Indeed, they even seek to evade the whole question of the creation of water power. This is clear from the opening sentence at page 12 of their brief where they omit any reference to power and insist that the TVA Act contemplates a project only for the purposes of navigation, flood control and national defense. If, as we have shown, none of the firm water power is created as the incidental result of the exercise of any one of the constitutional powers invoked, it can not logically be said that, in some nebulous and undisclosed fashion, the creation of the water power may be sustained, by confused and unanalyzed references to these federal powers generally. The summation of three zeros is still zero. It is in fact obvious, as hereinafter shown, that the appellees' argument rests upon the erroneous conception of law that if *any part* of the statutory or administrative scheme or *any part* of a federal power structure or a series of power structures has any relation to a federal function, then the Federal Government may purposefully and deliberately create water power which is not the incidental result of the exercise of any constitutional function.

A. THE APPELLEES' CONTENTION THAT THE CONSTITUTIONAL AUTHORITY OF THE FEDERAL GOVERNMENT TO CREATE WATER POWER IS NOT LIMITED TO THAT INCIDENTALLY PRODUCED IN THE DISCHARGE OF A FEDERAL FUNCTION IS UNSUPPORTED BY PRINCIPLE OR AUTHORITY.

The appellees contend that the Federal Government has constitutional authority to create water power in unlimited amounts, so long as the statutory or administrative scheme at some point touches the periphery of some constitutional power, and that the Federal Government may create water power by building separate structures or enlarging structures for the purpose of creating water power, although such additional structures or enlargements are not reasonably adapted nor incidental to the discharge of a federal function. This contention is variously stated as coming within the "choice of means," as being a matter of congressional discretion, and finally as a bald right to develop all resources (that is, to make all uses of property, private or governmental and federal or non-federal) which could be achieved by any sort of structures which the Federal Government might choose to erect at the site of any federal undertaking.¹ (Appellees' Br. 74, 75, 95-106.)

These claims overlook the well-settled principle that "to a constitutional end many ways are open, but to an end not within the terms of the Constitution *all ways are closed*," and that constitutional power is not a matter of congressional or administrative discretion. *Carter v.*

¹ The appellees state (Appellees' Br. 103):

"The projects of the Authority are the only projects which adequately develop the available sites to conserve the water resources of the Tennessee River system for navigation, flood control, *power*, and *other beneficial uses* (fdg. 93, r. 621, app. I, 51). The Congress, we submit, *may authorize the full utilization* of the necessary sites wherever the projects are reasonably required for navigation and flood control. * * *"

Carter Coal Co., 298 U. S. 238, 291. They overlook the fact that means adopted under the constitutional power over navigable waters must have "some positive relation to the control of navigation and not otherwise (be) inconsistent with the Constitution," and that such means must have "a real or substantial relation to the control of navigation or appropriateness to that end." *Wisconsin v. Illinois*, 278 U. S. 367, 415.

In support of their novel propositions the appellees erroneously rely upon *Green Bay & Miss. Canal Co. v. Patten Paper Co.*, 172 U. S. 58; *United States v. Chandler-Dunbar Water Power Co.*, 229 U. S. 53; *Arizona v. California*, 283 U. S. 423, 456; and *Buchanan v. United States*, 78 Ct. Cl. 791. (Appellees' Br. 96, 74, 90.) The appellees' fundamental misconception of these cases is sharply brought out by their discussion of *Green Bay & Miss. Canal Co. v. Patten Paper Co.*, and *United States v. Chandler-Dunbar Water Power Co.*, at pp. 96-97 of their brief.

The navigation works involved in *Green Bay & Miss. Canal Co. v. Patten Paper Co.* were the same navigation works which were before this Court in *Kaukauna Co. v. Green Bay & Miss. Canal Co.*, 142 U. S. 254, on appeal from 90 Wis. 370. In the *Kaukauna* case this Court held that the "surplus of water" (that is, surplus water power) was "necessarily" created by the dam and sustained its validity by a decision in which it condemned the creation of "a wholly unnecessary excess of water" and confined its approval to "cases where the surplus is a mere incident to the public improvement" (loc. cit. 275). In the same case the Supreme Court of Wisconsin had expressly held that the water power created was "in a true sense incidental to the erection of the dam" (loc. cit. 401).

There was no suggestion that the dam had been enlarged for the purpose of providing a power reservoir and thus creating additional water power. The fact that only

one per cent of the flow of the water thus necessarily impounded to create the navigation level was needed for the operation of the navigation facilities in no way affected the fact that the remaining 99 per cent was incidentally and necessarily created by a *bona fide* navigation dam. When these navigation works passed to the United States, it naturally acquired the water power which was incidentally created, and that is all that was held by *Green Bay & Miss. Canal Co. v. Patten Paper Co.*, *supra*. These cases plainly support the position of appellants. They could be apposite from the standpoint of appellees only if the appellants were contending (as appears to have been contended in the *Ashwander* case) that even in the case of a *bona fide* navigation dam the Federal Government does not own and can not develop any of the water power created by the dam beyond that used or reasonably anticipated to be required for navigation purposes. That such is not the issue here is too plain for misunderstanding. (Appellants' Br. 94-122.)

Similarly, appellees argue (Appellees' Br. 97) that because in the *Chandler-Dunbar* case only a small portion of the total flow of the river was necessary to operate the navigation facilities, that decision sustains the power of the Federal Government separately and purposefully to create water power not incidentally brought into being by the operation of *bona fide* navigation structures, and sustains a right in the Federal Government to create water power quite apart from the discharge of any constitutional function. In the *Chandler-Dunbar* case this Court quoted from and reaffirmed the principles laid down in the *Kaukauna* case and no claim was made, or could have been made, that the navigation works in the St. Mary's River had been built higher than necessary or appropriate for navigation purposes, or that any structures had been built for the creation of water power. All of the water power which was to be leased in the *Chandler-Dunbar*

case was incidentally created by the navigation works which had been built across the St. Mary's River. All the water used for power purposes was to be, and is, withdrawn from the waters impounded by the *bona fide* navigation structures. (See map opposite page 36, Statistical Report of Lake Commerce Passing Through Canals at Sault Ste. Marie During the Season of 1937, issued by the Corps of Engineers, United States Army.) Naturally the full flow of the St. Mary's River was not required to supply and operate the locks. If the dam involved in the *Chandler-Dunbar* case had been built so as to provide a power reservoir on top of a navigation project, or if that project had included large power reservoirs on tributaries, then the case might be cited by the appellees with some shadow of appositiveness to the suit at bar. Under the facts of the case and the holding of this Court the decision plainly supports appellants and negatives the pretensions of power asserted by the appellees.

Appellees erroneously state (Appellees' Br. 98) that in *Buchanan v. United States* the navigation dam (Ohio River Dam No. 41) "had been constructed *several feet higher* than required for navigation" and that "compensation was sought for the taking of lands to the extent they were *overflowed* by the excess taking." The facts, however, are that "none of the plaintiff's fast lands" had been overflowed (which shows that the dam was not high enough to create a pool overflowing the banks even at the dam site), that the alleged excess height was only *two feet*, and that the plaintiff did not challenge the power of the United States in the premises but only sought to recover compensation upon the theory that the project exceeded the natural servitude of riparian property in favor of navigation on navigable streams. (loc. cit. 794.) Of course if, as stated in appellees' brief, any lands of the plaintiff had been "overflowed," he could have recovered compensa-

tion regardless of the validity of the federal project. *United States v. Cress*, 243 U. S. 316. The inappositeness of this case to support the contentions of appellees is manifest.

In *Arizona v. California*, 283 U. S. 423, the only two challenges as to the validity of the federal action were that the Federal Government had no power to proceed with the construction of the dam in the Colorado River because (1) the river was non-navigable and (2) even if the river were navigable, the dam would not be built in the exercise of any federal power to improve navigation as it was to be subject to the Colorado River Compact, which made navigation subordinate to the local uses of irrigation and water power. These two contentions were disposed of by this Court on motion to dismiss (1) by taking judicial notice that the river was navigable, and (2) by holding that it was immaterial what the Compact provided as the Compact could not overrule the contrary provisions of the Boulder Canyon Project Act.

Therefore, on the state of the pleadings no further question as to the constitutionality of the construction of the dam was presented. In addition, as pointed out in the opinion, the Court had before it Congressional Documents and Reports of the Army Engineers which showed that the principal obstacles to navigation were the enormous amounts of silt brought down by the river (due to its great slope and location in a semi-arid region with little cover) and the insufficiency of the low water flow, which obstacles could only be removed by the construction of a dam with enormous capacity for storing silt and with sufficient capacity to store the entire flow of the river so as to provide necessary low water releases to make possible navigation.¹

¹ The Colorado River system carried more silt per square mile of drainage area than any other river in the United States, —more than 161 million cubic yards annually being carried past Yuma. (U. S. Water Supply Paper No. 234, pp. 78-98; H. Rep.

It was on that basis, with no evidence and indeed no claim to the contrary, that this Court in passing observed that the dam was not unrelated to the improvement of navigation and that any determination as to whether the particular structures were reasonably necessary was not before the Court for consideration.

It is not to be supposed that this Court in that decision intended to reverse the settled principle that the Federal Government has no constitutional authority to create water power except that which comes into being through the oper-

(Continued from page 15)

918, 70th Cong. 1st Sess., p. 4.) Successive deposits of this silt caused the river bed to rise higher and higher each year and resulted in an extremely unstable channel. (S. Rep. 592, 70th Cong. 1st Sess., p. 6.) The low water flow of the river was only 1300 cubic feet per second, all of which was frequently diverted for irrigation, leaving no flow in the channel for periods as long as ninety days. (H. Rep. 918, 70th Cong. 1st Sess., p. 4; Report of Major R. R. Raymond in H. Doc. 1141, 63d Cong. 2d Sess.; S. Rep. 592, 70th Cong. 1st Sess., p. 23.) This unique situation could not be corrected either by open channel improvement or by canalization, for silt deposits would still destroy the channel and the low water problem would not have been solved. Only by the construction of a huge storage reservoir such as Boulder, with provision for the accumulation of silt for many years and with reservoir capacity sufficient to store the entire annual flow of the river, could a navigable channel be provided. (H. Rep. 918, 70th Cong. 1st Sess., pp. 17, 22.)

The conditions on the Tennessee River are precisely opposite. The only satisfactory method of improving the Tennessee for navigation is by canalization and its satisfactory improvement by tributary reservoirs is impossible. (H. Doc. 328, 71st Cong. 2d Sess., pp. 23, 65.) The Tennessee carries only about 2.2 per cent as much silt as does the Colorado, and has no silt problem. (H. Doc. 328, pp. 26, 39, 40.) Its low flow is more than three times that of the Colorado and none of it is diverted for irrigation. (H. Doc. 328, p. 31; H. Rep. 918, 70th Cong. 1st Sess., p. 4.) A 9-foot navigable channel could be provided only by canalization. (H. Doc. 328, p. 23.) Regulation of flow even by controlling all of the principal tributaries would not provide such a channel. (H. Doc. 328, p. 65.) Thus the Tennessee River may be improved for navigation only by canalization and the effect of storage projects on its tributaries, if any, is unfavorable to navigation. (Appellants' Br. 25.)

ation of structures having a real, substantial and *bona fide* relation to the discharge of some constitutional function. Appellees' contrary contention is negatived by the fact that the opinion in *Arizona v. California* cites *United States v. River Rouge Improvement Co.*, 269 U. S. 411, 419, and by the express holding of this Court in *Ashwander v. Tennessee Valley Authority*, 297 U. S. 288, 340.

As before pointed out, the existence of a constitutional power is not a matter of congressional discretion, nor is it a matter of choice of means to an end. If the principle urged by appellees and their construction of *Arizona v. California* were sound, then it would follow that any purported regulation of interstate commerce which in any way touched interstate commerce would be constitutional and immune from judicial review even though it undertook plainly to regulate matters of intrastate concern having no relation to, or effect upon, interstate commerce. It is familiar law that regulations of interstate commerce which include subjects not properly falling within that power may not escape constitutional condemnation because *in part* they deal with matters falling within that field. The power to improve navigable streams is merely implied from the power to regulate interstate commerce. It would be a strange situation indeed if it were the law that this implied power is free from all restraint and may be made to include subjects outside the scope of that power, upon the ground that they are immune from judicial review as mere matters of choice of means to an end or of congressional discretion.

The Federal Government undoubtedly has the power to provide, and in some cases does provide, Diesel or steam power to generate electricity for the operation of navigation locks. If the principles advanced by the appellees are sound, the Federal Government as a choice of means to an end may build at any navigation lock a steam generating plant sufficient in capacity to serve several States and,

so long as it devotes some fraction of the power to operating navigation locks, use the surplus to engage in a public utility business as a federal monopoly, regulate local electric rates and service, and establish a federal policy of public or non-profit operation of the electric business throughout the States within transmission distance.

A recognition of the appellees' claim would vest the Federal Government with the right to appropriate all beneficial uses, if not with the ownership, of all of the water resources in the United States, federal or non-federal and navigable or non-navigable.¹ In the last analysis, the appellees' claim rests upon an alleged necessity to prevent waste of potential water power resources. They state at page 106 of their brief that the "sole question is whether the resources of the Tennessee River may be developed by the Federal Government or not at all." While this circumstance would not furnish a substitute for constitutional power, it is without basis in fact.

The Reports of the National Waterways Commission and of the Inland Waterways Commission (upon which appellees place so much reliance), the history of the "308 Surveys" (reviewed at pp. 6-7 of our main brief), the his-

¹ The scope and effect of appellees' claims are overwhelming. The total electric sales to ultimate consumers in the United States, as reported by the Edison Electric Institute, was approximately 95,000,000,000 kilowatt-hours for the year ending June 30, 1938. The Federal Power Commission has reported that the undeveloped hydro-electric resources of the United States will produce over 275,000,000,000 kilowatt-hours annually. (Fed. Power Comm. Interim Report, Power Series No. 1, 1935, p. 33, Table 14.) If, as appellees claim, the Federal Government has the authority to construct storage reservoirs upon any waters which ultimately drain through navigable channels to the sea upon the ground that low water releases for power operation will increase low water flow, and may deliberately develop all of the power resources at such sites "to avoid waste of potential water power," then it is plain that the Federal Government may at any time take over the entire business of supplying electricity to the public as a federal monopoly. Manifestly, the claims of the appellees prove far too much.

tory and form of the Federal Water Power Act, H. D. 328 and the provisions of the Rivers & Harbors Act of July 3, 1930, adopting the Federal Navigation Project for the Tennessee River (discussed in our main brief, pp. 6-10), all show *not* that the Federal Government owns and has the power to develop all of the water resources of the United States, *but a recognition of the fact that Congress should exercise its paramount power over navigation with due regard for the right of the States and their people to develop the water power and other non-federal resources of navigable streams.* That such cooperation is impossible, or even difficult and burdensome, is belied by the terms of the Rivers & Harbors Act of July 3, 1930 (see Appellants' Br. 7-10), by the report of the Corps of Engineers in H. D. 328 (Comp. Ex. 105°), by the Federal Power Act and by the fact that the State of New York has entered into an agreement with the Corps of Engineers pursuant to the policy declared in N. Y. Laws of 1931, ch. 772, sec. 1, under which all of the potential water power of the St. Lawrence River will be developed by the State of New York in the event of a federal improvement of that river for navigation. (Third Annual Report, N. Y. Power Authority, N. Y. Leg. Doc. (1934) No. 92, p. 62.) The quotation from the Federal Water Power Act at p. 100 of appellees' brief shows how the Federal Government may regulate the development of other water uses by the States and their people so far as necessary to preserve legitimate interests of navigation which is the source and limit of any constitutional concern of the Federal Government.

Whether the States and their people will develop the potential water power resources of the Tennessee basin, or of any other basin, depends upon economic feasibility. But their action or inaction in this respect, whether wise or unwise, does not vest any constitutional power in the Federal Government. If there is any potential water

power "wasted" by reason of failure of the States and the people to develop hydro-electric resources, that potential water power is not the property of the Federal Government and with it the Federal Government has no constitutional concern. Indeed, an economically unsound development of water power or a development of water power in the absence of any market is itself an economic waste.

The claim that the Federal Government may create water power, build power reservoirs and engage in the power business merely to defray the cost of some federal undertaking is plainly absurd. The Federal Government is granted power to raise money *by taxation and by borrowing* to carry out the functions of government. It has been granted no power to engage in businesses for the purpose or with the hope of making money either to build federal structures or to carry on the functions of government. Nor do the appellees take anything by referring to the power of the Federal Government to spend for the general welfare. We are not here concerned with an expenditure for the general welfare, but with the power of the Federal Government directly to engage in a continuous undertaking; and the power to spend for the general welfare is not a grant of power for the Federal Government directly to undertake anything, and much less to engage in undertakings not related to its powers, merely because they involve the expenditure of money. *United States v. Butler*, 297 U. S. 1; *Carter v. Carter Coal Co.*, 298 U. S. 238.

Appellees rely upon an alleged "intimate relation" between navigation and power development. (Appellees' Br. 99, 51, 52.) This is supposed in some fashion to extend the power of the Federal Government to create water power beyond that which is incidentally created by the operation of a *bona fide* constitutional structure. Under such circumstances there is no "intimate relation" beyond the fact that

both water power and navigation depend upon water but in decidedly different ways.¹ There is an intimate relation between the production of primary commodities or of goods and the flow of interstate commerce, but the Government could hardly engage in the production of primary commodities or the manufacture of goods upon the ground that there is an "intimate relation" between such production or manufacture and the flow of interstate commerce.

The appellees further assert that the Federal Government, having once constitutionally established a structure at which some water power is constitutionally created, may build power reservoirs in order to "maintain" and "improve" the property of the United States. (Appellees' Br. 95, 30.) This supposed principle is said to apply with peculiar force where the Federal Government has installed generating capacity or even provided emplacements for generators in excess of the amount of firm water power lawfully created. Every hydro-electric project has generating capacity which exceeds the low water flow and is less than high water flow; and the ratio between installed generating capacity and high flow is a matter of economic judgment. But the argument of appellees (Appellees' Br. 30, 95) comes to this. In a constitutional structure, such as Wilson Dam under the National Defense Act of 1916, the Government may not only install sufficient generators to utilize the water power created, but if it installs or even provides emplacements for more generators, then it may

¹ Navigation attempts to overcome the fall of water by the creation of slack-water pools, by dredging, or by other means. Power seeks to increase, or concentrate, and to utilize the fall of water. Navigation is chiefly concerned with depths and widths of channels and is most benefited by the minimum low water discharge which will fill the channel and supply lockage. Power is not related to channel dimensions, and the development of firm or commercial power requires the maximum low water discharge obtainable.

build other power reservoirs to create enough water power to utilize the excess generating capacity; and then, if it makes another mistake and creates more water power than can be converted by the generating capacity already installed, the Government may install more generators; and if the Government happens to install too many additional generators, it may then build more power reservoirs in order to develop and maintain its property. In other words, the greater and more numerous the mistakes, the greater is the constitutional power.

The inappositeness of cases dealing with the power of the Federal Government to irrigate arid public lands to make them habitable and place them in condition for sale is manifest. Appellees rely upon such cases as *Irwin v. Wright*, 258 U. S. 219, 231; *United States v. Hanson*, 167 Fed. 881; *Kansas v. Colorado*, 206 U. S. 46, 92. At a constitutional dam the property, if any, which the Government has for sale is water power. The building of power reservoirs or other structures to create *other* water power (we are not here dealing with the conversion of water power into electricity) can not possibly be said to be an improvement of the property which the Government had for sale.

1. **The Reports of the Federal Waterways and Conservation Commissions, relied upon by appellees, did not contemplate a federal development of the non-federal resources of inland waters such as water power.**

The Reports of the National Waterways Commission, the Inland Waterways Commission and the National Conservation Commission did not contemplate a federal development of the resources of inland waters for power, navigation and flood control. (Appellees' Br. 99-100.) An examination of these reports discloses that the primary consideration was that federal navigation improvements should be made with due regard for the non-federal, private and

local purposes of power and flood control in exactly the same manner as H. D. 328 recommended that States, municipalities and private individuals be permitted to construct high power dams so long as they did not lessen the capacity of the waterway for navigation. (Appellants' Br. 6-10.)

The Preliminary Report of the National Waterways Commission (S. Doc. 469, 62nd Cong., 2nd Sess.) states:

"That improvements not essential to navigation should not be undertaken by the Federal Government." (p. 82.)

" * * It should always be borne in mind that the waterway improvements made by the Federal Government under the exercise of its authority should be restricted to navigation. Whenever bank protection or flood prevention or the clarification of water is the sole object of improvements, the question presents little difficulty in its solution. Such projects are not a proper charge upon the Federal Treasury. A more difficult problem, however, is presented where the improvements just mentioned have as their object both navigation and the protection of private property. In such cases, in the opinion of the commission, the expense should be apportioned between the Federal Government and communities directly interested. In many instances proposed improvements have as their main object the protection or benefit of private property. In such cases there is a distinct benefit conferred upon individuals or localities which is only of a remote or very indirect benefit to the country as a whole. Lands subject to periodical overflow or lands of uncertain value because of the danger of erosion, when improved, are multiplied many times in value, and there is a constant danger that such improvements will be advocated under the guise of river and harbor legislation framed to benefit navigation, when the real object is the benefit which will accrue to individuals or localities."* (p. 83.)

" * * The commission would, however, repeat in this connection the recommendation made in No. IV,*

that improvements by the Federal Government be restricted to those essential to navigation." (p. 83.)

"The control of the Federal Government over navigable streams has to do with navigation only." (p. 86.)

The final report of the National Waterways Commission (S. Doc. 469, 62nd Cong., 2nd Sess.) states:

"4. The Federal Government has no constitutional authority to engage in works intended primarily for flood prevention or power development. Its activities are limited to the control and promotion of navigation and works incident thereto. The commission is of the opinion that flood prevention is primarily a local problem, and the work of controlling floods should in the first instance be undertaken by the minor political subdivisions, but that the Federal Government may very properly participate with the localities in carrying out such works on navigable streams, where a substantial and necessary improvement to navigation will result. Unless some such policy as this is adopted and adhered to, there is grave danger that the Federal Government may go outside its proper jurisdiction and become involved in enormous expenditures which are for local benefit. It has sometimes been urged that the Federal Government should undertake works for flood prevention on non-navigable streams which happen to cross a State boundary line. It is clear that in such a case, if navigation is not concerned, the Federal Government should have nothing to do with flood prevention. A method is provided in the Constitution by which the States may cooperate for this purpose.

"5. The extent to which the Federal Government should participate in the expense of constructing a reservoir system at the headwaters of a navigable stream should be determined in each particular case by an investigation of Government experts possessing the necessary training and facilities for undertaking a study of this nature. If such investigation shows that the promotion of navigation will require the reinforcement of the flow of a stream during the dry season through the aid of storage reservoirs and shows the

number and cost of reservoirs necessary for this purpose, the Federal Government will have a satisfactory basis for sharing in the expense of constructing a larger system intended also for preventing floods. *In this connection it should be noted that the prevention of floods will indirectly benefit navigation, but this alone is not sufficient reason for the participation of the Federal Government in reservoir projects.*" (pp. 27-28.)

The Preliminary Report of the Inland Waterways Commission (S. Doc. 325, 60th Cong. 1st Sess. p. 25) and the Report of the National Conservation Commission (S. Doc. 676, 60th Cong. 2nd Sess. pp. 479) recognized the same principle and recommended that the Federal Government cooperate with States, municipalities, corporations, and individuals where navigation was also involved, but that the developments for power and flood control be undertaken only by States, municipalities and private agencies and not by the Federal Government.

2. The appellees' attempt to construe the TVA Act so as to limit the scope of the power development authorized by that Act is unsound.

The appellants have analyzed the nature, purposes and scope of the TVA Act in their principal brief. (Appellants' Br. 6-20.) In general the appellees have not challenged this construction of the Act. However, the appellees do attempt to minimize the scope of the Act with reference to the development of the power resources of the Tennessee River and its tributaries. (Appellees' Br. 34-72.) While the stage in the execution of the TVA Act, known as the TVA Unified Plan and comprising the current construction schedule of TVA, is far more than sufficient to bring it within the condemnation of the *Ashwander* case and applicable constitutional principles, the construction of the Act urged by the appellees is plainly untenable.

It is not open to debate that the TVA Act, prior to the amendments procured by TVA in 1935 after the decision of the lower court in the *Ashwander* case, did clearly and explicitly authorize TVA to develop all of the power resources of the Tennessee River and its tributaries. (See Appendix, p. 5, Appellants' Br.) Appellees now assert that this blanket power was curtailed by the amendment of 1935 and quote the first part of Section 4(j) as amended in support of their contention. (Appellees' Br. 34.) They omit the *cumulative* grant of power contained in Section 4(j) as amended, which reads:

" ; and shall have power to acquire or construct power houses, *power structures*, transmission lines, *navigation projects*, and *incidental works in the Tennessee River and its tributaries*, and to unite the various power installations into one or more systems by transmission lines." (Appendix, p. 5, Appellants' Br.)

Manifestly these "power structures" and "navigation projects" which may be constructed anywhere in the Tennessee River and its tributaries are in addition to those authorized in the portion of Section 4(j) as amended, to which appellees limit their quotation at page 34 of their brief. Manifestly this cumulative grant will permit the construction of any power development desired by the appellees at any point in the Tennessee River and its tributaries. But even the portion of Section 4(j) as amended, which is quoted by the appellees, will, if measured by appellees' theories of statutory and constitutional construction, include authority to construct power projects "not unrelated to navigation" upon every creek and up to every spring house in the Tennessee basin, upon the theory that the power operations may increase the low water flow with either no benefit to, or trifling effect upon, navigation.

It is also argued that the incidental character of power development under the Act is established by the direction

that the operation of the power projects shall be subordinate to the paramount right of navigation and of flood control so far as it falls within the field of federal power. (TVA Act, Sec. 9(a); Appellees' Br. 88.) *This is precisely the same kind of a provision which is included in the Federal Power Act for the regulation of the development by private interests of non-federal water resources in such a way as to prevent interference with the paramount right of navigation.* (Appellants' Br. 11.)

B. THE APPELLEES WHOLLY FAIL TO MEET THE ISSUE THAT NONE OF THE FIRM WATER POWER WILL BE CREATED BY THE CONSTITUTIONAL EXERCISE OF THE IMPLIED POWER TO IMPROVE NAVIGABLE STREAMS.

The arguments of the appellees are devoted to the proposition that these incidental navigation facilities will benefit navigation and consequently are entirely beside the point. Nowhere do they meet the controlling issue. This is apparent from an examination of their principal contentions in so far as they have not already been covered in our opening brief.

1. The appellees fail to show even an incidental relation between their tributary power projects and the improvement of navigation.

We have previously examined and shown untenable the appellees' contentions (Appellees' Br. 42, 49-50), that constitutional authority for the construction of their large tributary power projects may be rested upon the ground that low water releases incident to power operations will during the construction period to some extent temporarily increase the depths in portions of the main river where TVA has postponed navigation improvement in the interests of power development. (Appellants' Br. 25-6, 111-113.) The appellees apparently recognize the

untenable character of this claim and now for the first time boldly assert that low water releases which are incident to power operations, would provide the channel essential for navigation below Pickwick without canalization. (Appellees' Br. 16-17, 82.) Since both the Federal Navigation Project and the TVA Unified Plan provide for complete canalization of the Tennessee River, it is plain that *this alleged temporary benefit*, even if in accord with the facts, could not afford constitutional authority for the construction of large power projects on the tributaries at a cost of approximately \$120,000,000. But the contention is not in accord with the facts.

Appellees in support of this contention rely solely upon a hypothetical question put to the witness Putnam, in which he in effect said that if the extravagant claims advanced by the appellees with reference to the enrichment of low water flows were true (for which, of course, he did not vouch), there would be no reason for the construction of the Gilbertsville Project. (Putnam R. 2312-3.) Any contention that the project depths could thus be created below Pickwick is refuted by the entire record.

Appellees' witness Barker testified that the Tennessee River could not be improved for 9-foot navigation except by canalization. (R. 1493.) In H. D. 328 (Comp. Ex. 105°), it is stated at page 12: "Improvement of the main river solely by regulation of flow by means of reservoirs would not be satisfactory, *because sufficient navigable depths can not be secured.*" And at page 33, the District Engineer, a witness for appellees, said: "The only satisfactory method of development of the main stream and its tributaries is by canalization," and the same District Engineer shows in a Table, appearing at page 65 of H. D. 328, that with the construction of all reservoirs which he found possible on the entire Tennessee River system at an estimated cost of \$1,200,000,000, the navigable depths in this portion

of the Tennessee River (Riverton to Paducah) would only be 8 feet. This falls four feet short of the depth required for a 9-foot waterway; for the evidence is uncontradicted that under the standard practice of the Corps of Engineers a 9-foot waterway is constructed with over-depths of 3 feet in order to provide adequate 9-foot navigation. (Putnam R. 1169, 1173-4; Watkins R. 1604-5; Barker R. 2009.)

In a further effort to find some relation between the tributary power projects and navigation, appellees assert in a footnote (Appellees' Br. 88) that the dead storage behind Norris Dam, plainly and solely adapted to the creation of water power, was necessary "to preserve existing navigation on the Clinch River," citing Finding 68. The fact is that there has been no navigation on the Clinch River since 1930 and such insignificant navigation as existed on the Clinch before that time was confined to a 2 to 1½ foot project on the portion of the river between its mouth and the head of navigation, 13 miles below the site of Norris Dam. (Annual Report of the Chief of Engineers, 1936, Part 2, p. 777; Fdg. 40.) Moreover, the testimony of appellees' witness Barker shows that the river was not practically navigable below Norris Dam and that barges could neither be brought to that point nor loaded at that point. (R. 1998.) The further assertion that the dead storage behind the dam was necessary "to prevent foreclosure of the river's future improvement for navigation" is answered by the fact that the dam 265 feet high has no navigation facilities, and by the further fact that it would not be practicable to provide any navigation facilities (Fdg. 80, R. 619) so that the dam itself constitutes a complete barrier to any possibility of creating navigability on that portion of the Clinch River.

In their search for some excuse other than power for the huge Hiwassee project and especially its dead storage, appellees assert that the maintenance of the dead storage

at Hiwassee (euphoniously termed "slack water pool") "would be of value for the preservation of *its* level by affording a capacity for the deposit of silt." (Appellees' Br. footnote, p. 88.) This claim (based upon Finding 68, rejected in this particular by Judge Gore) is fanciful. There is no evidence that silting creates any navigation problem on the Tennessee River or its tributaries, and much less that there is any silting problem on the Hiwassee with its headwaters in the timbered regions of the Great Smoky Mountains. In fact, silting in the Tennessee River Basin is relatively small (H. D. 328, p. 39) and it would be untenable to suggest that such a negligible matter might afford a constitutional basis for the construction of large power developments by the Federal Government. Manifestly this dead storage can have no value for flood control or low water regulation. Appellees do not, and can not, assert that this dead storage has any navigation value.

Finally, appellees try to minimize the dead storage in the Hiwassee project by making the obviously misleading comparison between the capacity of its dead storage and the capacity of the total storage (dead storage, power storage and flood storage) in all of the reservoirs of the TVA Unified Plan on the Tennessee River and its tributaries. In fact, the lower 135 feet of the Hiwassee reservoir, or from elevation 1280 to 1415, constitutes dead storage upon which is superimposed 111 feet of power storage. (Fdg. 43, R. 605; Def. Ex. 50.) No credible purpose for the creation of this dead storage, utilizing over one-half of the useful height of the dam, can be found except the creation of water power. An examination of Finding 43 (cf. Columns 5, 6, 10 and 11) also shows that the balance of the Hiwassee reservoir is entirely taken up with power storage (there called "low water regulation") and that *this project does not even have a small superimposed flood control reservoir*. It is wholly a power reservoir.

The attempt of appellees to deny that five-sixths of the firm or commercial power is created by the TVA tributary projects is wholly indefensible. (Appellees' Br. 51.) The testimony that five-sixths of the firm water power to be created under the TVA Unified Plan will be created by the tributary projects is uncontradicted in the record. (Appellants' Br. 28, 45-46.) The amount of firm or commercial water power is dependent upon low water flow. The effort of the appellees to cloud this issue by saying that at times (which are, of course, during periods of ample flow in the main river when the tributary reservoirs are filling up their power storage) the generators at the tributary projects may not be in operation and that the tributaries merely provide an increased water supply from which electricity is generated during the low water season is sheer quibbling. The short and simple answer is that if the tributary projects are eliminated from the TVA Unified Plan, the quantity of firm or commercial power to be created by that Plan will be reduced five-sixths.

Appellees assert that low water releases, which are the incident of power operations, would benefit navigation on the Mississippi through increasing low water flows. (Appellees' Br. 81.) Appellees concede that their authority under the Act, in so far as it has any relation to navigation, is limited to improvement of navigation on the Tennessee River or its tributaries. (Appellees' Br. 34.) Appellees rely upon Finding 52, which was rejected by Judge Gore and is contrary to the clear weight of the evidence. (Appellants' Br. 26.) Moreover, any suggestion that the construction of a huge power development costing hundreds of millions of dollars on the Tennessee River and its tributaries could be sustained as a constitutional choice of means for a trifling increase in low water flow on the Mississippi plainly falls of its own weight. (Appellants' Br. 113.) Thus, General Ferguson, President of the Mis-

Mississippi River Commission, testifying with respect to the lower Mississippi River in the recent Hearings Before the House Flood Control Committee, said:

"Mr. Chason. In that reach what do you do in order to keep a sufficient depth for navigation throughout that entire system? Is the river naturally of such a depth that you do not have to do any local works?

General Ferguson. Very few. We have to confine the river in one channel that is sufficient to give the depth required." (Hearings, H. R. Com. on Flood Control, 75th Cong., 3rd Sess., p. 63.)

2. The appellees fail to show any constitutional relation between the improvement of navigation and the creation of the water power at the TVA projects over-all.

Most of appellees' claims do not relate to whether any of the water power is created by structures having a real, substantial, *bona fide* and primary relation to the improvement of navigation, but to whether the incidental navigation facilities do benefit navigation. Other claims relate to alleged benefits of no practical significance which, if they existed, would merely be incidental results of the construction and operation of a large power system which by no possibility could be regarded as falling within the range of constitutional choice of means for improvement of navigation.

The appellees' principal claim is that the waterway incidentally resulting from the construction of the TVA power project will be "superior" to the Federal Navigation Project adopted in the Rivers and Harbors Act of July 3, 1930. (Appellees' Br. 24, 76.) In our main brief, we have reviewed the evidence and shown that the advantage from the standpoint of navigation lies with the Federal Navigation Project costing substantially less than one-sixth of the estimated cost of the TVA Power Project. (Appellants' Br. 22-36.) The appellees rely upon Finding 52 (R. 610) which

was rejected by Judge Gore and upon Finding 54, which enumerates alleged superiorities of the TVA incidental navigation channel and facilities and which was modified by Judge Gore to a simple statement that the TVA channel would have greater depths and widths and fewer lockages than the Federal Navigation Project. (R. 666.) Judge Gore then made additional findings of evidentiary facts (not contradicted by findings of evidentiary facts by the majority), which plainly establish that the Federal Navigation Project would produce navigation facilities at least equal, if not superior, to the incidental TVA navigation facilities. (Add. Fdgs. 16-18, 20-22, 24, 26-28, 30, 34-38, 40, 44, 45, R. 674-9.)¹

The statement in Finding 54 and in the opinion (R. 548-9) is that the superiority of the navigation channel resulting from the high dams was recognized by the Board of Engineers for Rivers and Harbors in H. D. 328, 71st Congress, 2nd Session, and rests upon a quotation from pages 11-13 to the effect that "such a waterway (with low dams) would be inferior to the high dam developments and would not permit the economical development of power." The appellees and the trial court overlooked the fact that this statement was embodied in that part of the Report of the Board of Engineers containing its summary of the Report of the District Engineer and constituted no part of the discussion or recommendations of the Board

¹ The purpose of comparing the physical and functional characteristics and the costs of the projects in the TVA Unified Plan with the physical and functional characteristics in the case of the Federal Navigation Project is not, as appellees well know, to show that a comparable navigation improvement could have been obtained by the construction of a less expensive system of dams (as asserted in Appellees' Br. 75-6) but to demonstrate that the TVA projects are merely power projects with some incidental navigation facilities and an attempt purposefully to create a great federal power project in the guise of exercising power to improve navigation.

(H. D. 328, pp. 8-19), and the further fact that the Board of Engineers in its own analysis makes no statement to support such a conclusion. It seems apparent that the Board of Engineers made an error in attributing this statement to the District Engineer. No such statement appears in his Report. Indeed, the District Engineer stated:

"The plan (referring to the Federal Navigation Project adopted in the Rivers & Harbors Act of July 3, 1930) however, will provide a waterway comparable in every way with the improved Ohio and adapted to incorporation with a consolidated inland waterway system of 9-foot depth. * * *

The district engineer believes that no lesser project will provide an adequate waterway for modern barge traffic and therefore believes that *if there be any modification of the plan by the substitution for any two or more low dams of a high dam to develop power or provide flood protection, that the capacity of the waterway for the economical movement of modern barge traffic, should not thereby in any way be lessened.*" (H. D. 328, p. 100.)

At page 25 of their brief, appellees again quote *part of* a paragraph in the Report of the Chief of Engineers which again merely summarizes *part of* the Report of the District Engineer and does not express any opinion of the Chief of Engineers; and at the same time they omit the Chief's summary of the definitive recommendation of the District Engineer (H. D. 328, p. 5, par. 17) that the low dam plan should be adopted, which plainly shows that this truncated quotation is not subject to the construction sought to be placed upon it by appellees.

On page 26 of their brief, appellees quote an excerpt from the Report of the District Engineer as "the final recommendation in the Report." The final recommendation in the report and the one incorporated in the Rivers & Harbors Act of July 3, 1930 was, of course, the Report of the Chief of

Engineers (quoted, Appellants' Br. 9.) But appellees' quotation is not even the final recommendation of the District Engineer. Even the sentence quoted significantly omits the words "and subject further to such modifications as may be found necessary *in carrying out the provisions of the Federal Water Power Act.*" Obviously, a federal navigation project as distinguished from power developments to be made by States and private interests did not involve action under the Federal Water Power Act. But more inexcusable still, the appellees' quotation omits the final and definitive recommendation of the District Engineer *which expressly recommends the adoption of the low dam navigation project* with a proviso that other interests might construct high dams under the Federal Water Power Act, *provided that "the capacity of the waterway for the economical movement of modern barge traffic will not be in any way lessened."* (H. D. 328, pp. 100-101.) This recommendation of the Federal Navigation Project by the District Engineer is repeated by the Board of Engineers, p. 14, par. 15, and by the Chief of Engineers, p. 5, par. 17.

Any careful reading of the Reports of the Board of Engineers and the District Engineer in H. D. 328 makes perfectly plain (1) that the Federal Navigation Project adopted in the Rivers & Harbors Act of July 3, 1930 is equal, if not superior, to any navigation channel which might incidentally result from the construction of high power dams with incidental navigation facilities, and that it would "afford navigation facilities on a par with those now existing on the Ohio River" (H. D. 328, p. 97); (2) that the system of projects described in the report as essential or proper to the development of the maximum resources of the Tennessee River and its tributaries included non-federal development for the non-federal purpose of power development; (3) that all such plans "require the coopera-

tion of power companies" (H. D. 328, p. 97); (4) that such developments lay outside the field of federal power (H. D. 328, p. 2, par. 8; p. 19, par. 33); and (5) that the proviso in the final recommendation of the Chief of Engineers relating to the construction of power dams by private interests and States, which was embodied in the Act adopting the project, was in recognition of the policy, evidenced by the Federal Water Power Act and the Reports of the Waterways Commissions upon which appellees rely, that the Federal Government should exercise its paramount power over navigable streams for the benefit of navigation with due regard to the development and utilization of non-federal uses by States and private interests.

The statement that the recommendation was based "on fiscal considerations" (Appellees' Br. 26) is utterly without support in H. D. 328. That the high power dams are not better for navigation and that they can only be justified, with their great cost, for power development was stated in 1935 by General Pillsbury, Assistant Chief of Engineers, when testifying before the House Committee on Military Affairs with respect to proposed amendments of the TVA Act. (Appellants' Br. 35-36.) Appellees inexcusably attempt to create the impression that the testimony of General Pillsbury before this Committee was not received in evidence. (Appellees' Br. 80.) This is in the teeth of the record. (R. 3121.)

Apart from their misinterpretation of H. D. 328, appellees rely upon alleged advantages of an inconsequential character which, if they existed, would be mere incidental results of the construction and operation of a huge power project and ignore the clear superiority of the Federal Navigation Project in the important practical characteristics of an inland waterway, such as capacity for carrying commerce, cost or economic justification, prompt pro-

vision of a continuous nine foot channel and the advantages of open river navigation during a large part of the year. (Appellants' Br. 22-31, 108-9.)

The appellees do not deny that the TVA incidental navigation facilities will have overdepths of only 2 feet but assert that the Federal Navigation Project adopted in the Rivers and Harbors Act of July 3, 1930 made no provisions for overdepths. (Appellees' Br. 79.) They cite no finding in support of this statement and it is squarely contradicted by Additional Finding 4 made by Judge Gore, by the testimony of appellees' witness Watkins (R. 1604-5) and by the testimony of Major Putnam. (R. 1174-5.) They refer to a statement made by appellees' witness Barker on direct. On cross examination the witness Barker admitted that 3-foot overdepths are provided on 9-foot projects under the standard practice of the Corps of Engineers and that they had been provided on exactly similar 9-foot projects adopted and in part constructed on the Illinois, Ohio and Kanawha Rivers prior to the submission of H. D. 328 to Congress. (R. 2009.)

As to the hazard from wind and waves on the wide TVA lakes (Appellants' Br. 22, 26), the appellees do not attempt to make any answer other than that one of their witnesses stated that he preferred the wide TVA lakes (which he had never navigated) to the low dam channel. (Appellees' Br. 77-8.) The record, however, clearly discloses from the testimony of Col. Willson, based on his experience as a navigator on the Tennessee River and on the Wheeler and Wilson lakes, and from the testimony of Major Putnam, operator of commercial barge lines on the Green, Illinois and Ohio Rivers (R. 1150), that there would be a great hazard to the type of equipment with a low free-board normally operating on the inland waterways. (Appellants' Br. 22-26.) Finding 42, cited by the appellees, is clearly inapplicable, and Finding 54, to the extent

that it finds that the wide lakes of the high dams are preferred to the channels of the low dams by the practical navigator, and that craft normally operating on inland waterways will be able to navigate the Tennessee River without change of design or extent of loading, is contrary to the clear weight of the evidence and was rejected by Judge Gore, who specifically found that the wide TVA lakes would require a different type of transportation equipment from that commonly used on the Ohio and Mississippi Rivers. (Add. Fdg. 22.)

The statement in appellees' brief and in Finding 56 that the improvement of the Tennessee for modern commercial navigation would result in annual transportation savings of approximately \$10,000,000 is plainly irrelevant because both the estimates in H. D. 328 and those made by appellees' witness Alldredge were entirely independent of whether the river was canalized by high or low dams. (R. 2055.) As bearing upon the reliability of these Findings, it should be noted that the actual estimate of savings was really a little over \$7,000,000, that even this estimate was only the estimate of the District Engineer and although stated in the Finding as the estimate "of the Army Engineers," the Division Engineer and the Board of Engineers both expressed the opinion that the savings "would be much less" and that the estimates of the District Engineer were "excessively optimistic." (H. D. 328, p. 5, pars. 18, 19; p. 19, par. 31; p. 20, par. 34; see also Putnam R. 2322-3.)

The appellees' claim that the TVA projects are located at or near the sites selected for high (power) dams by the Army Engineers in H. D. 328, if true, merely confirms the fact, overwhelmingly shown by the entire record, that they are power dams. (Appellees' Br. 38.) These were the high dams outlined by the Corps of Engineers as necessary or appropriate for the maximum development of the

power resources of the Tennessee River and its tributaries and were in direct contrast with the navigation dams recommended by the Chief of Engineers, and indeed by the District Engineer, which were adopted in the Federal Navigation Project of July 3, 1930.

The appellees' claim that the sequence of construction has been determined according to the requirements of navigation and flood control and not of power (Appellees' Br. 38) would, if true, in no way establish that the projects do not include separate and independent power developments. However, the claim is unfounded. (Appellants' Br. 29-31.) After 5½ years of construction activity, TVA has failed to improve the lower part of the river below Pickwick or the section between Chattanooga and Knoxville, the two largest cities. (Appellants' Br. 30.) The appellees rely upon the testimony of the witness Crane. Mr. Crane testified that in his opinion the sequence of construction of the TVA projects was primarily for power. (R. 1283-4.) The appellees also cite Finding 75, which was rejected by Judge Gore and is contrary to the great weight of the evidence reviewed in appellants' brief.¹ (pp. 29-31.) Judge Gore found that the TVA

¹ Dr. A. E. Morgan testified before the House Committee on Military Affairs, 74th Cong. 1st Sess. (Comp. Ex. 365†):

"Mr. May: What is the distance between Pickwick Dam and Wilson Dam?

"Dr. Morgan: Fifty miles, approximately. So that the possibilities of the present Government property at Wilson Dam cannot be realized until this Pickwick Dam is built below.

"Mr. Faddis: You mean the possibilities for navigation?

"Dr. Morgan: *The possibilities for power.* The possibilities for navigation of Wilson Dam can be realized." (p. 94.)

"Dr. Morgan: * * * The Wheeler Dam has storage for 2 weeks. It can take care there of a drop in power use over the week-end by storing the unneeded water, and if a little

(Continued on page 40)

Unified Plan is not primarily designed to promote navigation (Add. Fdg. 21), that it is being operated primarily for the purpose of power (Add. Fdg. 73), and that the TVA dams and their order of construction are designed primarily to produce a large amount of firm power for use on a utility system. (Add. Fdgs. 75, 76.)

The appellees' claim that each project has appropriate elements of design for navigation (patently untrue as to the tributary projects, see pp. 29-30, *supra*) and flood control and that each project will result in substantial benefit to navigation (Appellees' Br. 39-40) in no way shows that the creation of water power is incidental to navigation and flood control and the examination of the physical and functional characteristics of the projects in appellants' main brief shows that it is not. (Appellants' Br. 22-60.) Indeed, *Finding 93 makes it very clear that the creation of water power is an entirely independent objective and function of the TVA projects* and it is there sought to justify the provision for the maximum development of water power by the assumption that the use of the sites for navigation or flood control would waste the power resources of the river system, which is, of course, shown to be untrue by the Report of the Chief of Engineers in H. D. 328 and by his recommendations incorporated in the Rivers & Harbors Act of July 3, 1930.

(Continued from page 39)

freshet puts a lot of water into that reservoir, it can take care of such fluctuations in flow.

"So Wheeler Dam can regulate the flow for 2- or 3-week periods; Wilson Dam can regulate it day by day, and Pickwick Dam can be handled to let water out for navigation below.

"Taking the three dams together, we can smooth out that flow and save all of the fluctuations that are not longer than 2 or 3 weeks, and then the storage dams on the reservoirs can take care of the greater fluctuation between winter and summer. *Taking them all together, we will not have any secondary power. It will all be turned into prime power.*" (p. 101.)

In support of a similar proposition at pages 41-42 of their brief, appellees cite Findings 51, 53, 54, 56, and 57. Finding 51 is plainly irrelevant. Finding 53 simply states that each of the projects will result in improvement for navigation. Assuming this were true, it would in no way bear upon the question whether the power development is separate from and not incidental to navigation improvement. It is plainly untrue as to the tributary dams, already discussed, and Judge Gore modified the finding by excluding the tributary projects. (R. 665.) Finding 54 enumerates supposed elements of advantage in the incidental TVA channel and has been previously discussed. (See pp. 37-38, *supra*.) As there pointed out, it was modified by Judge Gore (R. 666) and the inference sought to be drawn by appellees is completely negatived by the findings of evidentiary facts made by Judge Gore and not controverted by any findings of evidentiary facts made by the majority. Finding 56 has been previously discussed and has been shown to be both irrelevant and erroneous. (See p. 38, *supra*.) Finding 57, while probably an overstatement, has no relevancy to the issue. The intangible benefits, whatever they are, would flow from a *bona fide* navigation project as well.

The appellants' assertion that "there is no basis for the contention that the projects have been enlarged beyond the needs of navigation and flood control" (Appellees' Br. 50) involves both a fallacy and a misstatement. The comparison of the Federal Navigation Project and the TVA Unified Plan shows that there is no relation between the size of the TVA projects and the requirements of navigation. There is no contention that the relatively small flood control reservoirs superimposed on the TVA power projects are too large for flood control purposes. The constitutional vice in the TVA Unified Plan is that the major part of the TVA projects are power reservoirs and we not

only assert, but appellees concede, that they do not provide adequate flood control. (See p. 49, *infra*.)

The appellees assert that the projects so far constructed have been operated primarily for navigation and flood control. (Appellees' Br. 47-8.) Even under normal conditions this would amount to nothing more than a statement that the power projects have been operated in recognition of the paramount rights of navigation, just as any private power project must be operated under the terms of the Federal Power Act. Finding 76, relied upon by appellees, is, therefore, without significance on the issue under examination. But the fact is that the operations of TVA up to the time of trial were wholly without significance. As testified by appellees' witness Karr (their Power Superintendent, whom the appellees forgot to identify in their brief), at all times prior to the date of trial the capacity of the TVA power system had so far exceeded any markets which the appellees had been able to wrest from utilities that no problem of regulation of water for power production was involved. (R. 2214, 2217-19.) Of like character is the statement in Finding 74, that approximately 85% of the water released from Norris during the year 1937 was not required or useful for the production of power. As Mr. Karr stated, the water would not have been wasted had there been any market for the sale of power. (R. 2217-18.) These findings still leave at large the question whether the TVA project is, or includes, a separate power development not incidental to navigation improvement.

Upon the basis of Finding 68 the appellees assert that the TVA projects are the only ones which will provide flood control for the Tennessee and Mississippi Rivers in combination with a 9 foot navigation channel on the main stream of the Tennessee. (Appellees' Br. 40, 88.) The portion of the finding here relied upon was rejected by Judge Gore and is plainly contrary to the clear weight of the evi-

dence. (R. 666.) The TVA projects include incidental navigation facilities (except at the tributary projects), superimposed flood control reservoirs (except at Hiwassee) and large power reservoirs which are separately and purposefully constructed and neither essential nor appropriate to navigation or to flood control; and manifestly it is unnecessary to construct these power projects, separately and deliberately included, to provide either navigation or flood control. (Appellants' Br. 36-60.)

C. THE APPELLEES WHOLLY FAIL TO MEET THE ISSUES THAT NONE OF THE FIRM WATER POWER IS CREATED BY FLOOD CONTROL STRUCTURES AND THAT ANY FLOOD CONTROL FEATURES ARE A MINOR PART OF THE TVA UNIFIED PLAN.

We do not contend that the TVA Unified Plan contains no flood control features, although they are a very minor part of that Plan. In our main brief we have shown that none of the firm or commercial power will be produced by any flood control structures incorporated in the TVA Unified Plan, and that in fact the projects in the TVA Unified Plan consist of large power reservoirs, purposefully and separately built, upon which are superimposed relatively small flood control reservoirs. (Appellants' Br. 38-44, 49-53.) It is a matter of common knowledge that flood control and water power development may not be attained at the same site (1) unless the storage capacity available at the site is sufficient to permit the construction of a power reservoir upon which is superimposed a flood control reservoir of sufficient capacity to meet the needs of flood control, or (2) unless, in cases where the storage capacity available at the site does not exceed the requirements for flood control storage, part of such storage capacity is deliberately appropriated for a power project at the expense, and in diminution, of necessary flood storage. Obviously in either situation, the power development is separate and

purposeful. The present Chief of Engineers, General Schley, stated this principle before the House Flood Control Committee in 1938, as follows:

"Mr. Jarrett. Do you think an hydroelectric dam negatives flood control or helps it?

General Schley. The two are essentially in conflict to this extent, that the flood control reservoir should be emptied as promptly as possible to make capacity for the next flood. For power or for irrigation, the water is impounded and the reservoir is kept full to the greatest possible extent, and for that reason the two are in conflict. *However, it is not at all uncommon to have one reservoir superimposed on the other, flood control capacity on top, impounding capacity below, where you have such a suitable site. You have so much impounded up to a certain plane for power and keep it full at all times, and on top of that you have space which is emptied down to that plane as rapidly as possible so that it will have capacity for the next flood—then you have a multiple purpose or two-purpose reservoir.* In some cases, the two reservoirs had better be separate where local conditions fit that plan best—one reservoir being kept full as much of the time as possible for power or for irrigation, its spillway being ample to let the flood pass on without damage to the structure, the other reservoir being operated to stay empty and retard the flood and prevent it doing damage to the valley below." (Hearings, H. R. Com. on Flood Control, 75th Cong. 3rd Sess., p. 24.)

General Tyler, Assistant Chief of Engineers, testified to the same effect in these hearings. (*Ibid.*, pp. 27-29.)

With the exception of the astonishing contention that the dead storage at Norris and Hiwassee is not an important issue (Appellees' Br. 89, 49; see pp. 29-30, *supra*) the appellees have avoided any discussion of the physical and functional characteristics of the TVA projects, their dead storage and power storage, the wide differences between the costs, physical aspects and effectiveness for

flood control of the TVA projects and the costs, physical aspects and effectiveness of a genuine flood control system. (Appellants' Br. 38-44.) They rely upon references to generalities constituting bare conclusions in findings which, although often erroneous, could have been made with reference to any power project upon which was superimposed a small flood control reservoir. The findings on this subject relied upon by appellees were prepared by them and signed verbatim by the court or a majority of the court. They reflect the infirmities of that procedure and of the erroneous conception of law that the Federal Government may create water power as a separate and independent objective. But even under these circumstances, the generalities and bare conclusions in the findings, upon which appellees rely, do not conflict with the conclusions established by appellants' review of the basic facts.

Finding 39 is in substance that the TVA projects provide some navigation improvement and some flood control and will create water power. This finding could be made with reference to any power project having incidental navigation facilities and a small superimposed flood control reservoir and is entirely consistent with the fact that water power is separately and purposefully developed. Finding 41 is that the TVA projects are like the high (power) dams outlined in H. D. 328; and when it is recalled that this reference is not to the navigation projects but to the projects there outlined for the *maximum development of the power resources* of the Tennessee River and its tributaries, it is plain that the finding is in accord with the fact that power development is a separate and primary objective of the TVA Unified Plan. The finding includes the statement that the projects in H. D. 328 were designed primarily for navigation and flood control, but this part of the finding was rejected by Judge Gore and an examination of the document makes plain that the majority fell into

grave error in accepting the interpretation provided for them by appellees. (See pp. 35-36, 60, herein.)

Finding 42 is in substance that each of the projects has properly designed facilities for navigation, flood control and generation of power. While, as previously shown, the tributary projects have no relation whatever to navigation and no navigation facilities, the finding is in no way inconsistent with the obvious fact that the TVA projects are primarily power developments and that the firm power is separately and purposefully created. While Finding 43 (rejected by Judge Gore) overstates the extent of the flood storage, it does not negative the separate power development and, in spite of the overstatement of flood storage, shows over 4,000,000 acre feet for low water regulation, which is the euphonious name the appellees use for power storage. Manifestly the release of water during periods of low flow is not for the purpose of flood control. We have previously shown that its effect upon navigation, if any, is detrimental. It is plainly a power operation.

While Findings 44 and 45, signed verbatim as submitted by the appellees, contain many statements contrary to the clear weight of the evidence, the filling of the tributary reservoirs during the high water season is a typical power operation and not a flood control operation. It is not the ambition of a flood control operator to achieve a full reservoir. Finding 47, signed verbatim as submitted by the appellees and rejected by Judge Gore, is not supported by the evidence, and is in the teeth of common knowledge.¹ (See pp. 43-44, 47, herein.) General Ferguson, Presi-

¹ When the dams of the Miami Conservancy District, whose sole function was flood protection in the Miami Valley, were built under the direction of Dr. A. E. Morgan, a tablet was erected at each dam, which reads:

"The dams of the Miami Conservancy District are for flood prevention purposes. Their use for power development or for storage would be a menace to the cities below." (R. 1804.)

dent of the Mississippi River Commission, in the recent Hearings before the House Flood Control Committee, stated:

"Mr. Jarrett. Should reservoirs be empty or full when flood projects?

General Ferguson. Empty.

Mr. Jarrett. *Would that apply to the Tennessee Valley Authority?*

General Ferguson. *The reservoirs designed for flood relief would be covered by that.*" (Hearings, H. R. Com. on Flood Control, 75th Cong., 3rd Sess., p. 60.)—

Indeed, Finding 47 recognizes that there is a conflict between the use of a reservoir for flood control for local protection and its use for power development. The weasel-worded reference in that finding to navigation is plainly irrelevant to the question of flood control storage and the latter part of the finding leaves one quite bewildered as to how a full reservoir can impound flood waters even though owned by TVA.

Finding 59 (rejected by Judge Gore) has no bearing on the issue. Finding 60 (rejected by Judge Gore) in no way shows that the TVA projects are not power reservoirs upon which are superimposed relatively small flood control reservoirs. While obviously flood control dams must be built high enough to provide the storage necessary for flood control, they need not, and should not, be built on top of power reservoirs. Thus Norris Dam might be much lower (as it obviously would have been under the design of the dam for flood control only by the Bureau of Reclamation, Appellants' Br. 45) if it did not consist of a 200 foot power reservoir upon which is built a 14 foot flood control reservoir. Whether the discharge of a flood control dam shall be automatically controlled or controlled by manual operations is irrelevant to the point at issue. (See pp.

50-52, *infra.*) Finding 65 can, of course, be made with respect to any power reservoir which has a small flood control reservoir superimposed upon it. Thus these and other findings, signed verbatim by the majority as submitted by the appellees, are entirely consistent with the fact, overwhelmingly established by indisputable evidentiary facts, that none of the water power is created by the relatively minor flood control structures included in the TVA Unified Plan. Indeed, *Finding 93 expressly states that the creation of water power is one of the separate objectives of the TVA Unified Plan* and seeks to justify its creation upon the untenable and constitutionally irrelevant claim that the use of the sites for constitutional functions alone would prevent the creation of water power.

Finding 94 does not show (as appellees assert at p. 89 of their brief) that the water power is created by the construction and operation of projects for navigation and flood control. The TVA projects are power projects with incidental navigation facilities (except at the tributary dams) and with small superimposed flood control reservoirs. The navigation facilities and the small flood control reservoirs superimposed on the large power reservoirs can, of course, be operated without interfering with the power development. That the appellees' construction of the finding is erroneous is further shown by the fact that Judge Gore, who joined in Finding 94, expressly found that the TVA Unified Plan is not primarily designed to promote navigation on the Tennessee River and its tributaries (Add. Fdg. 21), and that the proposed method of operation is primarily for power. (Add. Fdg. 73.)

It is thus plain that even the findings relied upon by appellees in no way negative, and in a large measure support, the fact that the water power is separately and purposefully created.

1. The appellees concede that the TVA Unified Plan provides no adequate flood protection for the Tennessee Basin; and the record establishes that none of the firm water power is created by flood control structures.

The appellees concede, and the court found, that the principal flood damages in the Tennessee Basin occur at and above Chattanooga and that a flood control program to achieve the maximum practicable flood protection upon the Tennessee River and its tributaries should be directed primarily to providing protection at Chattanooga and above. (Fdgs. 81, 83, 84, 85, 86; Appellees' Br. 17.)

The appellees concede that the TVA projects will not eliminate flood hazards at and above Chattanooga or reduce floods sufficiently to make feasible the construction of local flood protection works (Appellees' Br. 45) and, for another purpose, they assert that they do not intend to build any more projects. (Appellees' Br. 37.) They do not deny that a system of genuine flood control reservoirs on the tributaries above Chattanooga would achieve the greatest practical flood protection at Chattanooga and above and make feasible the construction of local flood protection works. They merely say that such a plan was never recommended "by any public authority" and does not "appear ever to have been proposed for the Tennessee by any one outside the present trial." (Appellees' Br. 87.)

The appellees overlook the fact that practically all of the sites selected by the witness Kurtz, after careful study in the field, were at or near the sites selected by the Army Engineers for genuine, i.e. empty, flood control reservoirs for local flood protection in House Document 259, 74th Cong. 1st Sess., and the fact that the court found that such a system could achieve flood control on the Tennessee.¹

¹ Appellees make the astonishing assertion that "the system of detention basins would preempt for the single purpose of

(Fdg. 70, rejected by Judge Gore obviously because it contains other statements plainly erroneous.)

The appellees also make the astonishing objection that such a system of genuine flood control projects on the tributaries would have no value for flood protection on the Tennessee River below Chattanooga. (Appellees' Br. 46.) Of course such a system would have some benefit even on the lower Tennessee. But, more importantly, it is uncontroverted that flood damages on the Tennessee River below Chattanooga are negligible (Fdgs. 81, 82, 83, 84), and that it is not practicable to relieve them beyond the extent that they would be relieved by such a system of flood control reservoirs on the tributaries. On the other hand the huge TVA power reservoirs on the Tennessee River below Chattanooga will permanently flood and destroy thousands of acres more land than is occasionally flooded in a state of nature, and will permanently destroy the usefulness of lands producing annually crops with a value from 30 to 50 times greater than the entire flood damages on that section of the river. (Appellants' Br. 54, 127; Fdg. 84.)

Appellees seek to cloud the issue by the claim that detention reservoirs may not be as effective as manually controlled flood reservoirs. (Appellees' Br. 87.) A detention flood reservoir may be constructed so that its discharge is regulated automatically or manually, the latter method being what appellees call "controlled storage." In either

(Continued from page 49)

local flood protection the limited number of available sites and thus foreclose the development of the river for any other uses." (Appellees' Br. 87.) The only other uses for the available sites upon the tributaries is for the development of power, and appellees are therefore in the peculiar position of objecting to the construction of genuine flood control reservoirs because such reservoirs will not permit the non-federal function of purposefully and separately creating water power. This contention of appellees is also peculiarly inconsistent with their assertion that there is no conflict in the operation of projects for power and flood control. (Appellees' Br. 51.)

case a genuine flood control reservoir is kept empty except at time of flood and it is a matter of indifference (either from the standpoint of the practicability of providing flood protection on the Tennessee by genuine flood control reservoirs or from the standpoint of whether such flood storage creates water power), whether the genuine flood control reservoirs are constructed to operate automatically or by manual control at times of flood. In either case the genuine flood control reservoir produces no firm water power and the contention of the appellees on this point is an inconsequential quibble. (Offer to Prove, Justin R. 2383, 2385.)

The appellees are entirely silent upon the point that if flood protection on the Tennessee River had been a primary objective of the TVA Unified Plan, that objective could have been attained for a fraction of the cost of the Unified Plan. Nor do they explain the fact that two years after TVA had adopted a plan for the construction of projects costing over \$473,000,000 the Congress in the Act of June 28, 1933, directed the Corps of Engineers to make a survey and report for flood control at Chattanooga. The professed concern of appellees for protection of life has a hollow sound in view of the fact that the only instance of loss of life in the Tennessee Valley from floods shown on this record occurred on the Emory River where appellees neither provide, nor plan to provide, any protection whatever. (Kurtz R. 1209.) The power possibilities on that river are small. (H. D. 328, pp. 51-2, 61-2.)

Of like character is appellees' reliance upon Finding 60 (rejected by Judge Gore) that for most effective flood control it is desirable to "provide high dams with controlled storage." The question of "controlled storage" from the standpoint of flood control has been shown to be a mere quibble. Proper flood control dams on the tributaries would of course be high enough to provide the necessary flood storage, but they would not be built higher in

order to create power storage, nor would any part of the storage necessary for flood control be diverted to a power reservoir, and if such dams are built higher to create a power reservoir, the water power thus created is separately and purposefully created and is in no sense incidental to flood control. (See pp. 43-45, 47-48, *supra*.)

2. **The appellees' contentions that the flood control reservoirs superimposed on the TVA power projects make any material or consequential contribution to flood protection on the lower Mississippi is contrary to the great weight of the evidence; and in any event, appellees in no way show that the firm power is created by any flood control structures.**

The appellees principally rely upon the claim that certain Government Reports, chiefly those of the Corps of Engineers, show that tributary flood control reservoirs have long been recognized as an essential part of a system to control floods on the lower Mississippi and on the basis of this claim they assert that the TVA projects (although only a small part of each project consists of a superimposed flood control reservoir) make a substantial contribution to flood control on the lower Mississippi. (Appellees' Br. 19, 21, 86, 28, 85, 43, 46.) Were this true it would in no way show that the firm power is created by flood control structures. But the claim is unfounded. It rests largely upon a misinterpretation of official documents incorporated in a requested finding of appellees which was adopted verbatim by the trial court. (Fdg. 67.)

It will be recalled that H. D. 328, 71st Cong., 1st Sess. (Comp. Ex. 105°) not only described the system of navigation dams (which was adopted in the Rivers & Harbors Act of July 3, 1930) but also a vast system of projects for the maximum development of the resources of the

Tennessee River and its tributaries for power, flood control and navigation, which might be constructed in its non-federal parts by State and private interests and in its federal parts by the United States at a total cost of \$1,200,000,000. Of this grandiose combination of projects (containing immensely more flood storage than the TVA projects) the Mississippi River Commission said that "*Benefits to the lower Mississippi may be considered as practically immaterial.*" (Comp. Ex. 105°, p. 101.) The Board of Engineers and the Chief of Engineers concurred with this conclusion of the Mississippi River Commission. (Comp. Ex. 105°, p. 19, par. 32, p. 23, par. 47.)

The following statement of General Ferguson, for the past 5½ years President of the Mississippi River Commission, shows that the construction of the Gilbertsville Project (the only TVA project which by location and size of its superimposed flood control reservoir could conceivably affect Mississippi River floods) would have no effect upon the Mississippi flood control system:

"Mr. De Muth. Do your plans for the protection of the lower Mississippi take into consideration the fact that we are going to build the Gilbertsville Dam? Will that make any change in your plans?

General Ferguson. No." (Hearings, H. R. Com. on Flood Control, 75th Cong. 3rd Sess., p. 57.)

After the great Mississippi flood of 1927, a Board of officers of the Corps of Engineers under the Chairmanship of Colonel Kelly (a witness for appellants) was appointed to study the problem of Mississippi flood control, and this Board in recommending against the inclusion of tributary reservoirs in the Mississippi flood control system, said:

"The desirability of a system of reservoirs for use in controlling or assisting in the control of floods of the Mississippi has been discussed from many viewpoints since it was first proposed eighty-five years ago. The question was considered by Humphreys and Abbot in

connection with their general Mississippi study in the late fifties of the last century and by the Engineering Commission of 1874. Since the establishment of the Mississippi River Commission, that body has several times given consideration to the desirability of incorporating a system of reservoirs into the general plans for the improvement of the river and the control of its floods. *In each of these former cases the final determination has been unfavorable, * * ** (Com. Doc. 2, H. R. Com. on Flood Control, 70th Cong., 1st Sess., p. 1.)

This conclusion was based upon a system of genuine flood control reservoirs and not upon a system of power reservoirs with small flood control reservoirs superimposed.

H. D. 259, 74th Cong., 1st Sess., cited frequently in appellees' brief, was an exhaustive study of the effect of the construction of tributary flood control reservoirs at all available sites on all of the tributaries of the Mississippi River. It was found possible to provide approximately 100,000,000 acre-feet of genuine flood control storage and the effect of this vast system of reservoirs was considered under Plan I, whereby they were to be operated to secure the maximum benefits on the Mississippi at the expense of local flood protection, and under Plan II, whereby they would be operated primarily for local flood protection. The Corps of Engineers rejected Plan I and, with respect to Plan II, found:

"The Commission finds that the direct benefits from the entire reservoir system set forth in Plan II at the present time are not commensurate with the cost."
(H. D. 259, 74th Cong. 1st Sess. p. 5.)

This, of course, referred not merely to any indirect or incidental benefits to the Mississippi but to the local benefits as well. And it should not be overlooked that this was a system of genuine flood control reservoirs without any dead storage for power or power storage as clearly appears from

pp. 19, 20 and 29, of the Report, where it is shown that such reservoirs were only to be operated at certain times, and from pp. 32-3, where it is shown that the reservoir capacities provided in the plans were the minimum required to give the flood control benefits stated, but that at some sites it would be practicable to provide additional storage for navigation, water power, or local water supply uses.

H. D. 306, 74th Cong., 1st Sess., is a "308 Report" on the water resources of the Ohio River for navigation, water power and flood control. With reference to the possible effect of the reservoir system, the Chief of Engineers said:

"These reservoirs control so relatively small a part of the total drainage area of the basin that they would have but small effect upon the Mississippi, * * *" (H. D. 306, 74th Cong. 1st Sess., p. 6.)

Committee Document 1 (H. R. Com. on Flood Control, 75th Cong. 1st Sess.) is a report made by the Chief of Engineers in the light of the experiences obtained in the great 1937 flood. *The Chief of Engineers does not recommend any reservoirs on the Tennessee River and does not even suggest that there will be any benefit to flood control on the Mississippi from the TVA system of power reservoirs on the Tennessee River and its tributaries.* The Chief of Engineers does recommend the construction of certain reservoirs on the tributaries of the Ohio, but concerning their effect on the Mississippi, says:

"The reservoirs set up in this report *may* reduce to some degree the frequency with which they (floodways) must be used, but the floodways will still be requisite to assure the safety of the areas to be protected." (*ibid.* p. 10.)

And concerning their effect for local flood protection on the Ohio, which was their primary purpose, the Chief of Engineers said:

"Despite their great cost, the reservoirs contemplated will not afford adequate protection to communities in the valley against such a flood as has just been experienced." (*ibid.* p. 5.)

It is thus plain that the official documents, relied upon by the appellees, negative the contention of the appellees and fully support the position of appellants.

Appellees' statement that the Tennessee River is one of the best rivers upon which to construct reservoirs for the reduction of floods in the lower Mississippi is misleading in so far as it implies that the TVA reservoirs on the Tennessee River are valuable for reduction of floods on the lower Mississippi. Appellees rely on a reference to part of the cross-examination of appellants' witness Kelly (Appellees' Br. 19, 21, 86) which does not support their statement. (R. 1382.) Colonel Kelly testified that storage reservoirs "are not practical or effective for the control of floods on the lower Mississippi" (R. 1370) and, with reference to the TVA Unified Plan, that "no expenditure is justified on the Tennessee River for flood protection on the Mississippi River at and below Cairo." (R. 1374.)

Appellees state that the TVA projects would have reduced the height of all floods since 1897 by two feet at Cairo on the Mississippi. (Appellees' Br. 43, 85.) This statement is not supported by any finding of the court. An examination of the record references of appellees will disclose that in practically every case, they are based upon hypothetical questions which were allowed frequently over the objection that there was no basis in the record for the hypothesis. (Kelly R. 1383; Clemens R. 1651.) It also appears that none of these witnesses had taken into consideration the fact that the TVA projects are largely power reservoirs, that most of the storage is dead and power storage and that under the official reports of TVA to Congress relative to the size of

its power projects, this storage could not be available for flood control purposes. (Watkins R. 1633; Clemens R. 1665; Sargent R. 1686; Bowman R. 1751; Woodward R. 1805; Kimball R. 1859; Floyd R. 1902.) In addition, the appellees' witnesses assumed a theoretical but practically impossible operation. (R. 1902; Appellants' Br. 55.)

The untenable character of the claim plainly appears from the fact that the Corps of Engineers reported that even the grandiose scheme described in H. D. 328 and involving about 200 dams would have no appreciable effect upon the Mississippi. (See pp. 52-53, *supra*.) Moreover, floodways are an essential part of any system for Mississippi flood control; and appellees' witness Clemens testified that with an expenditure of approximately \$6,000,000 for right of way in addition to the levee, the Birds Point-New Madrid Floodway, practically completed since the 1937 flood, will reduce the flood stages in the Mississippi River at Cairo between 6 and 7 feet, which represents a cost of approximately one million dollars a foot. (Clemens R. 1669.) Hence, the claim of the appellees comes to a contention that the Federal Government might, as a choice of means, resort to the construction of a huge power system upon the ground that it would reduce Mississippi flood heights by two feet at a cost of over \$235,000,000 a foot.

On page 21 of their brief appellees misquote a statement in appellants' brief by substituting the words "the existing levee system" for the words "the completed Jadwin-Markham Plan" in the following statement (Appellants' Br. 58):

"The completed Jadwin-Markham Plan would have been sufficient to control the Mississippi floods of 1912, 1913 and 1927 and will be sufficient to control the maximum flood to be anticipated on the Mississippi River."

Nowhere in their brief do the appellees deny the truth of that statement or even consider it. They have deliberately

confined their consideration to the *present* levee system, whereas appellees' and appellants' witnesses agree that the completed Jadwin-Markham Plan on the Mississippi River, which is now nearing completion, will be sufficient to provide for any Mississippi River flood. (Kelly R. 1373-4; Clemens R. 1672.) Appellees' witness Clemens testified concerning the 1937 flood:

"Jadwin Plan levees and recent cut-offs function perfectly under severe test. It is surprising that there should have been so much hysteria as the flood approached the lower Mississippi Valley. The country had enough confidence in the engineers to give them over \$300,000,000 for the Mississippi River Flood plan. Why then did people become unstrung when the floods descended upon that plan? Now that the flood has subsided it is clear that the plan worked about as expected—and that the flood was considerably less than the protection provided against it." (R. 1672.)

Appellees also contend that the levees on the lower Mississippi have reached the practical limits of height. (Appellees' Br. 21.) However, the reports of the Army Engineers disclose that this would be immaterial if true, because the channel rectification has greatly lowered flood heights for given volumes in the Mississippi and the flood by-passes purchased by the Government are essential under any system and sufficient to meet any situation. (Com. Doc. 1, H. R. Com. on Flood Control, 75th Cong. 1st Sess. p. 11.)

Dr. A. E. Morgan, Chairman of TVA, testified before a Subcommittee of the House of Representatives, 75th Cong., 1st Sess., that Norris reservoir would be filled to elevation 1010 in January and would be at elevation 1020 (the top of the power storage) on or about April 1st. (Comp. Ex. 116†, pp. 374-5.) In the only year of actual operation of Norris reservoir before the trial (when TVA had surplus power capacity) Norris reservoir was filled to elevation 1010 or higher at all times from January 17th

at least up to the summer low water season. (Woodward R. 1815; Add. Fdg. 72, R. 684.) Even the program of filling, submitted by the witness Kimball on Def. Ex. 90 and never in fact used, showed that Norris reservoir would be filled yearly to elevation 1010 early in April and to elevation 1020 (the top of the power storage) late in April. (R. 1848.) It is conceded that, to have any effect on the control of Mississippi floods, the water from the Tennessee basin must be withheld from Mississippi floods at least during the period from February 15th to May 15th each year (passing for the moment that floods may occur and have occurred at any time in the year). (Comp. Ex. 105°, p. 78, par. 52; Kelly R. 1386-7.) This confirms the obvious fact that TVA has built at Norris (as elsewhere) a power reservoir upon which is superimposed a relatively small flood control reservoir and it is equally plain that any pretense that this power storage provides even incidental flood protection for the Mississippi is untenable.¹

The appellees also assert that their method of operations conforms to the method of operation for navigation and flood control contemplated in H. D. 328 and H. D. 259. This argument is based upon Finding 46, which was rejected by Judge Gore but adopted verbatim by the majority as submitted by the appellees, and is a plain misinterpretation of these official documents. H. D. 328 in fact recommended no method of operation. It recommended the construction of a navigation improvement (adopted in the Rivers and Harbors Act of July 3, 1930) which was in no way similar to the TVA projects. The project, described in the report of the District Engineer as necessary or appropriate

¹ The 1934 Annual Report of TVA to Congress states:

"The *power storage* between the minimum pool elevation of 948 and the spillway crest at elevation 1020, the maximum elevation for *power storage*, will be 1,700,000 acre feet." (Comp. Ex. 113°, p. 8.)

for the maximum development of the power resources of the Tennessee River and its tributaries, was in large part to be constructed by private interests, if at all, and the Chief of Engineers made no recommendation for its adoption, and much less any recommendation as to its operation. (See pp. 34-36, *supra*.) But the method of operation for this non-federal development was for maximum power development. To that extent it may be said that TVA methods resemble the methods described in the District Engineers' report for maximum development of the power resources of the Tennessee River. The Chief of Engineers stated:

"The system (referring to a plan to develop 'the ultimate use that may be made of the waters of the Tennessee basin by the United States and its citizens') includes 149 hydroelectric power developments, together with certain auxiliary steam stations. The district engineer has worked out very completely the methods by which all these plans could be operated as a single system so as to effect the utmost economy and produce the maximum amount of power." (Comp. Ex. 105°, p. 3, par. 10. See p. 2, par. 8 for parenthetical insertion.)

The "methods of operation" considered in H. D. 259 related to genuine flood control reservoirs with no power storage and have no relation to the operation of the TVA power projects. (See pp. 54-55, *supra*.)

3. The appellees' contentions with respect to the extent of federal constitutional power in the matter of flood control are erroneous.

In our principal brief we have pointed out that the scope of any power of the Federal Government in the matter of flood control is not presented for determination in this case, but that, if it were, the power of the Federal Government over flood control would not extend beyond the power

directly to improve or protect navigable channels of interstate navigable streams. (Appellants' Br. 122, 124-7, 128-130.) However, appellees suggest that the power of the Federal Government in the matter of flood control extends generally to the protection of private property and the safety, comfort and convenience of the people in their places of abode within the several States. This is upon the theory that the protection of property and the means of production and the promotion of safety and convenience of the people in their dwelling places will contribute to the flow of interstate commerce. (Appellees' Br. 84.)

While appellees cite *Jackson v. United States*, 230 U. S. 1, and *Cubbins v. Mississippi River Comm.*, 241 U. S. 351, those cases do not support appellees' claim for the only relation between those cases and any claimed advantage from TVA projects to navigation on the Tennessee and Mississippi Rivers relates to appellees' claim that low water releases from their power operations will benefit navigation through enrichment of low water flows (Appellees' Br. 81, 83), a contention examined elsewhere and shown to be both without substance and, as to the Mississippi, outside the scope of the TVA statute. In the *Jackson* and *Cubbins* cases, the flood control structures (levees) had an immediate, direct and obvious relation to the maintenance and improvement of the navigation channels in the Mississippi River along which they were constructed. Indeed, they might reasonably be said to constitute part of those navigation channels.

Appellees suggest that a sufficiently direct relationship to interstate commerce may be found to exist from the circumstance that agricultural products, commodities in course of being processed and goods in process of manufacture in areas subject to occasional floods may eventually find their way into interstate commerce. (Fdg. 58.) If such indirect and remote relations will sustain the exercise of the in-

terstate commerce power, then that power may be extended over all of the processes of production and manufacture within the several States and may be made to embrace all of the subjects of State police power to promote the health, prosperity and general welfare of the people of the States. Like so many other claims of the appellees, the result would be the complete centralization of government and the destruction of the States. Undoubtedly the Federal Government may appropriate money in suitable cases to aid works undertaken by a State or a group of States under its power to spend for the general welfare, but the Federal Government may not under its power to spend extend the scope of its own direct activities. This limitation upon the proper activities of the Federal Government is plainly stated in the final Report of the National Waterways Commission (S. Doc. 469, 62nd Cong. 2nd Sess.) upon which appellees so strongly rely. (See pp. 22-25, *supra*.)

Finding 59 (rejected by Judge Gore) in no way shows that the alleged flood control features of the TVA Unified Plan have any real or substantial relation to the preservation or improvement of navigation channels and the evidence shows otherwise. (Appellants' Br. 36-37.)

D. NEITHER THE FACTS NOR THE LAW SUPPORT APPELLEES' CLAIM THAT ANY OF THE WATER POWER IS CREATED IN THE EXERCISE OF THE WAR POWER.

The only ground upon which appellees base their contention that "the power produced *at the tributary dams*" rests upon an exercise of the war power is that the court found that Norris Dam, by storing water during the high water season and releasing it during the low water season (i.e. by the typical operation of a power reservoir) will create additional firm water power at Wilson Dam. (Appellees' Br. 94.) That neither the TVA Act nor the TVA Unified Plan provide for, or permit, the development of

power for national defense is plain. (Appellants' Br. 60-1, 130-3.) The appellees not only ignore the facts, but cite no law to support their contention and seek to invoke an alleged right of the Government to improve its property—a proposition quite distinct from an exercise of the war power and which has been examined and shown to be unfounded in fact and in law on this record at pp. 21-22, *supra*.

III.

THE APPELLEES GROSSLY UNDERSTATE THE SCOPE OF THE TVA ACT AND OF THE TVA POWER PROJECT, AND MISINTERPRET THE POWER OF THE FEDERAL GOVERNMENT TO DISPOSE OF PROPERTY. (Answering Appellees' Br. 53-58; 106-160.)

A. THE APPELLEES' ANALYSIS OF THE TVA ACT. (Answering Appellees' Br. 106-109.)

In our analysis of the TVA Act, we have shown that the TVA Act authorizes the development of all of the hydro-electric resources of the Tennessee River and its tributaries, the construction of steam generating plants and the creation of a vast electric utility system and that it affirmatively and in detail provides for the carrying on of the electric business within the States as a federal monopoly, for the regulation of matters of intrastate concern, including local electric rates, services and practices, and for the establishment of a federal policy within the States of having the local electric business carried on by public bodies or non-profit organizations. (Appellants' Br. 12-17, 154, 159-160, 163, 175-177.) Apart from appellees' attempt to restrict the scope of the power project authorized by the TVA Act (discussed and shown to be erroneous at pp. 25-27, *supra*), appellees merely refer to a few isolated sections of the statute (Appellees' Br. 107-109) and in no way attempt to controvert the plain meaning and effect of the Act set forth in appellants' brief.

B. IN CONTRAVENTION OF THE UNDISPUTED FACTS IN THE RECORD, APPELLEES SYSTEMATICALLY UNDERSTATE THE SCOPE OF THEIR POWER BUSINESS DEVELOPED AND IN CURRENT PROCESS OF DEVELOPMENT. (Answering Appellees' Br. 53-58, 109-112.)

1. The firm-power capacity created by the execution of the TVA Unified Plan. In our main brief (pp. 66-69) we have set forth the facts with reference to the power capacity of the TVA system under the Unified Plan. As was there pointed out these facts were not embodied in any findings made by the majority of the trial court although they stand undisputed in the record. Appellees repeatedly state (Appellees' Br. 54, 57, 109) that the firm-power capacity of all the dams of the Authority "now constructed or authorized for construction" is 570,000 kw. at 60% load factor with all the generating units installed or "authorized" for installation. In fact this statement merely refers to a stage in the execution of the TVA Unified Plan, has no meaning in relation to the firm power capacity which will be created by the execution of the TVA Unified Plan and is patently irrelevant in a suit for preventive relief. The statement is grossly misleading as to vital facts not open to dispute, and it is coupled with the charge that in our presentation of the facts we have misrepresented "the scope of the Authority's undertaking in so far as it relates to power" by assuming "unauthorized installations at unauthorized dams and unauthorized interconnections with privately owned plants." (Appellees' Br. 57, 109.) That there may be no misunderstanding as to what projects are embraced in the current TVA Unified Plan or as to what power will be produced by the operation of such projects, we review the facts as they have been publicly and officially reported by appellees themselves and as the record shows them.

The projects embraced in the current TVA program *with construction schedules* and provisions made for power

installations are shown in the statements filed by TVA with the Sub-committee of the House Committee on Appropriations on December 13, 1937, during the course of the trial of this case (Def. Ex. 153†, pp. 919, 948):

<u>Completed Dams</u>	<u>Date of Completion</u>	<u>Power Installation Provided For</u>	
Wilson	By U. S. Army Engineers in 1925	444,000 kw.	
Norris	Aug. 1, 1937	100,000 kw.	
Wheeler	Sept. 1, 1937	256,000 kw.	
<u>Dams Under Construction</u>	<u>Beginning Date</u>	<u>Proposed Date of Completion</u>	
Pickwick			
Landing	Dec. 1934	Jan. 1, 1939	216,000 kw.
Guntersville	Jan. 1, 1936	June 1, 1940	96,000 kw.
Chickamauga	Jan. 1, 1936	Jan. 1, 1941	108,000 kw.
Hiwassee	July 1, 1936	July 1, 1941	120,000 kw.
<u>Proposed Dams</u>	<u>Scheduled Starting Date</u>	<u>Scheduled Date of Completion</u>	
Gilbertsville	July 1, 1938	July 1, 1945	192,000 kw.
Watts Bar	July 1, 1939	July 1, 1943	150,000 kw.
Coulter Shoals	July 1, 1940	July 1, 1944	60,000 kw.
Fontana	July 1, 1942	July 1, 1946	180,000 kw.
Total Installed Capacity:			1,922,000 kw.

The so-called "unauthorized dams" referred to in appellees' brief are those dams listed above as dams upon which construction has not yet been begun. None of these dams are included in appellees' figure of maximum firm power capacity. The first question is, do appellees intend to build them? The intention to do so is explicit in the whole defense that these structures are valuable if not indispensable to the purpose of Congress as expressed in the TVA Act. All of these dams have been listed in every report made to Congress since the adoption of the report of the Unified Plan. Each is an integral and inseparable part of the TVA development. Furthermore, Gilbertsville is now actually under construction with funds provided by Congress subsequent to the decision of the trial court. (Appellees' Br. 37.) Watts Bar and Coulter Shoals are main stream dams without which even an incidental navigable

channel could not be provided between Chattanooga and Knoxville under the TVA Unified Plan. So far as Fontana is concerned, the desire of appellees to eliminate it from consideration is understandable since it lacks even a pre-textuous relation to navigation and is valuable only for power and power regulation, but the fact that it is definitely scheduled to be built nevertheless remains. In answer to a direct question on that subject Director Lilienthal stated before the House Appropriations Committee in April, 1937, (Comp. Ex. 116†, pp. 516, 518):

“The Board’s decision, as indicated by the minutes of the Board, which I think ought to be inserted in the record at this point, is that the position taken by the Board in the report called Unified Development of the Tennessee River System, filed last March, is that the Fontana Dam should be a part of the unified system, and that is still the position of the Board. . . .”

The Board still is of the opinion that Fontana should be a part of the unified development, and in its annual report filed as for the fiscal year ending June 30, 1936, and signed in November, 1936, reiterated that position, and that still is the position of the Board, as shown by its action of March 16, 1937.

On page 27 of the report designated ‘Unified Development of the Tennessee River System,’ you will find table 3. That table shows a suggested program of dam construction which had the approval of the Board then, and, so far as I know, still has the approval of the Board. That schedule proposed the construction of the Fontana Dam on the Little Tennessee River, the construction to begin in the middle of 1938 and to be completed in 1941.¹

¹ Fontana was originally scheduled for construction ahead of Gilbertsville, Watts Bar and Coulter Shoals, which will incidentally provide a navigation channel at either end of the Tennessee River. Sometime later, for reasons described as “budgetary” its scheduled construction was postponed and precedence given to the main river dams. (See p. 760, United States Government budget for fiscal year 1939, submitted to Congress Jan. 3, 1938.)

There is no change in the Board's disposition as to the ultimate construction of that dam. Obviously, since the dam site is owned by the Aluminum Co. of America, it may be built by that company, but it definitely should be a part of the unified system."¹

The so-called "*unauthorized installations*" (Appellees' Br. 57) applies to all generating units for which provision is made in the design and construction of the dams, excepting such units as had been actually installed or ordered, or for the purchase of which TVA had made provision in its last budget request to Congress. Under this definition a substation, constructed or purchased since the date of the trial for the service of Knoxville, would be an unauthorized substation. Accordingly, the second question is, do appellees intend to limit the installation of generating capacity to those units which had been installed or ordered for the service of TVA's existing market, or do they intend to make additional installations as rapidly as they can expand their business? Appellees themselves concede that each of the dams, both main stream and tributary, will produce a very large amount of water power (Appellees' Br. 36), and it is argued throughout their brief that this power will be forever lost unless it is converted into electricity and consumed. Under Section 9(a) of the TVA Act, appellees contend that they are authorized, if not required, "to provide for the generation and marketing of electric energy in order

¹ It may be assumed that Mr. Lilienthal was not suggesting seriously that Fontana might be constructed by the Aluminum Company of America for navigation or flood control. Its construction will greatly increase the firm power capacity at the lower dams which the Aluminum Company owns on the Little Tennessee River, as well as the firm capacity of the main stream dams in the TVA system. Therein lies its value and the explanation of Mr. Lilienthal's statement that whether built by the Aluminum Company or by TVA "*it definitely should be a part of the unified system.*"

to avoid the waste of water power and * * * to assist in liquidating the cost or aid in the maintenance of the projects." (Appellees' Br. 54.)

It is true that TVA has not as yet installed in all dams which are in operation the full number of generating units for which they are designed. However, under the TVA method of operation certain things must precede the delivery of power. Markets must be acquired. Contracts must be negotiated with the municipalities and cooperatives. Arrangements must be made for financing and acquiring distribution facilities for such distributing agencies. High tension transmission lines, substations and other facilities must be designed and constructed and such facilities must be designed with the view to their use in serving other possible markets not yet acquired, in order to make an efficiently functioning system comparable to the systems of other integrated utilities serving in a wide area. The evidence establishes that TVA has been installing generating capacity not merely as rapidly as it could wrest, but in advance of wresting, markets from existing utilities. The number of generators actually installed or on order at the date of the trial is of no more significance in fixing the power capacity of the TVA system under the Unified Plan than would be the corresponding figures for the year 1936 or 1935.

This brings us to the ultimately vital question as to the productive capacity of this system as it is designed and is intended to be used. In the TVA report to Congress on the Unified Plan the statement is made that the system of dams recommended in that report, embracing Wilson, Wheeler, Norris, Pickwick, Guntersville, Chickamauga, Fowler Bend, Fontana, Watts Bar, Coulter Shoals and Gilbertsville, with full economical installation of generating capacity, will produce 660,000 kw. continuous power without the use of the Sheffield steam plant. (Comp. Ex. 328°,

p. 62.) This is the equivalent of 1,100,000 kw. at 60% load factor.

In the financial statement submitted to Congress in March, 1936 (Comp. Ex. 115†, p. 279, R. 2697), Director Lilienthal presented the following figures:

"Continuous capacity of integrated system	kilowatts	660,000
Annual primary output...	kilowatt hours	5,780,000,000
Estimated gross annual wholesale power revenue.....		\$23,120,000"

Appellees' witness Wessenauer testified (R. 2172 *et seq.*) that the figures given in the TVA Unified Plan were the result of calculations made by him, in the making of which he assumed integrated operation with the plants of the Aluminum Company on the Little Tennessee River below Fontana but deducted 90,000 kw. as being power which belonged to the Aluminum Company, and obtained a remainder of 660,000 kw. Referring to these calculations appellees' witness said:

"This figure of 660,000 kw. represents, as I understand it, the power that would be available to the TVA if they constructed the particular plants listed in table 6 on p. 62 (of the Unified Plan)." (R. 2184.)

Appellants' witness Kurtz (R. 1215) testified that the eleven dams in the Unified Plan, with regulation only by the tributary dams, would have a prime capacity of 660,000 kw. at 100% load factor and 1,100,000 kw. at a utility load factor of 60% and that when supplemented by the Sheffield steam plant they would have a prime capacity of 1,200,000 kw. at a 60% load factor.

It will be noted that the figure of 660,000 kw. continuous power represents TVA's own estimate, officially adopted and reported to Congress, and is not, as baselessly asserted at p. 109 of appellees' brief, a "fanciful assump-

tion" based upon an ultimate development of "*all possible dams at any of the 149 sites located on the Tennessee River system by the Corps of Engineers in House Document No. 328.*" As shown by H. D. 328 (Comp. Ex. 105°, pp. 14, 16, 67) the complete ultimate development of the Tennessee system will produce 5,000,000 kw. at 60% load factor and 25,000,000,000 kilowatt hours annually.

From this review of the record it is seen that the uncontradicted evidence fully corroborates the statements made in our original brief that the TVA hydro-electric system under the Unified Plan will have a firm capacity at 60% load factor of 1,100,000 kw. and will be capable of producing 5,780,000,000 kilowatt hours of firm energy annually. It is seen further that these figures do not represent an ultimate potential maximum of a theoretical development but the authoritative estimates as to the capacity of definite structures included in a definitely scheduled construction program. It is also seen that *appellees'* figure of 570,000 kw. at 60% load factor, taken from Finding 94 (R. 621), is, as that Finding on its face shows, *merely the capacity of an intermediate stage of the execution of the present construction program*, omitting completely the capacity of Gilbertsville, Watts Bar, Coulter Shoals and Fontana, and also the capacity of the additional generating units for which provision has been made at Wilson, Wheeler, Guntersville, Chickamauga, Pickwick and Hiwassee.

Thus to limit the consideration of the scope of TVA's undertaking with respect to the generation and disposal of power to the particular stage as it happened to exist at the time of trial puts the appellees in the position of contending that the claimed value of all of the above dams for navigation and flood control is a proper and indeed necessary subject for this Court to consider, but that the use and value of the very same dams for the production of

power is not. Further, to confine the scope of inquiry in an action for injunctive relief to the things which have already been done, may well mean that the determination of grave and important questions are made to depend upon whether the taking of particular proof occurred on Wednesday or Friday, and as applied to the facts in this case, that the right to challenge unconstitutional acts and the unlawful deprivation of property may not be exercised until the injury has been consummated, which is in effect a denial of the jurisdiction of equity and of the remedies of equitable relief.

2. The TVA power pool and transmission system. The principles just discussed apply with equal force to the TVA transmission system. At p. 56 of their brief appellees state: "In order to serve its purchasers, the Authority has constructed or acquired about 1,100 miles of marketing transmission lines, the largest of which is about 100 miles in length." Since no mention is made of any possible future construction of transmission lines, this statement conveys the misleading impression that the present 1,100 miles of so-called marketing transmission lines represent the completed TVA transmission system.

TVA's policy with reference to the construction of transmission facilities is set forth in its report to Congress:

"The number of additional transmission lines required must be determined from time to time, as opportunities to secure revenues by 'conveying to market' arise and as contracts for sale to public and private agencies are negotiated." (Comp. Ex. 328°, p. 60.)

It is thus plain that appellees recognize no limitation upon the expansion of their power system other than the size of the market which they are able to acquire and supply.

The recent taking over of the businesses of several utilities by TVA, to which appellees invite the Court's attention in their brief, is an impressive illustration of the rapidity with which the TVA transmission system may be, and the extent to which it must be, extended to complete the TVA power system. The extent of the area over which the TVA transmission system must be extended to dispose of the commercial power created by the TVA Unified Plan establishes beyond dispute the size of the TVA transmission system which is an integral part of the TVA Unified Plan. (Appellants' Br. 65-70.)

Under the TVA Unified Plan all of the dams will be interconnected so that the power generated at each dam will flow into one vast pool and will be available at any point upon the interconnected system for convenient transmission to the nearest market. Some 400 miles of this primary grid system have already been built and these lines are not included in the 1100 mile figure mentioned in appellees' brief which merely represents the high tension "marketing" lines which have already been built as a part of the ultimate network to be supplied from the power pool.

The completion of the primary grid system necessarily means the construction of lines to Gilbertsville, Hiwassee and Fontana, in order to bring them into the power pool, and as soon as that has been done, the pool from which power is to be drawn will extend from western Kentucky to northern Alabama and across Tennessee to the western end of North Carolina. Thus the 400 miles of "inter-plant tie lines," so far constructed, represent only the beginning of a primary system which has for its object not "conveying to market" but the pooling of a vast supply of electric power, the whole justification of which involves the construction of a great network of transmission lines

extending from this grid system to the markets within economic reach of the pool itself.

Professor Moreland testified that the marketing of the power to be produced under the Unified Plan will require a transmission system of from 12,000 to 15,000 miles of high tension transmission lines. (R. 1453.) This testimony was not rebutted by appellees and its authoritative character is not questioned in appellees' brief, unless that intention may be inferred from the slighting reference to the witness himself as "prophet Moreland." (Appellees' Br. 112.) It is an engineering fact that to supply the markets which are capable of absorbing 5,780,000,000 kilowatt hours of firm power annually will require a vast, interconnected high tension transmission system, corresponding to the transmission systems now serving the area, and if there is any need for the assistance of occult science, it is on the part of those who claim that such a result may be accomplished without it.

3. The competitive and duplicating character of TVA's power system. Since, as pointed out in our main brief (p. 71), TVA rates are from 25% to 60% lower than the State-regulated rates of other electric utilities operating in this area, no serious doubt can exist but that the development of TVA's definitely scheduled program will engulf the markets and destroy the efficiency and value of every electric utility system serving any substantial area within economic transmission distance of the TVA power pool. That there is nothing in appellees' brief which seriously challenges that conclusion may be briefly pointed out.

(a) *Unserved rural markets.* Appellees state that there are unserved rural areas in this section which furnish an "obvious market" for TVA power. (Appellees' Br. 108, 116-17.) It is thus apparently argued that the un-

served rural market will absorb some substantial part of TVA's surplus power capacity. There is no substantial unserved rural demand in the territories served by the appellants which meets the minimum recommended requirements of TVA itself. (Appellants' Br. 64.) Although TVA has constructed and is now serving through cooperatives more than 2,230 miles of distribution lines in rural areas not previously served, the present demand of that entire system comes to the insignificant total of 7,000 kw.¹ (Comp. Ex. 919, R. 3947, 3950.) Even by 1942, according to TVA's own optimistic estimate, this demand will not exceed 17,100 kw. (Def. Ex. 153†, p. 1001) which is about 1½% of the 1,100,000 kw. which will be produced by the TVA power system under the Unified Plan. As the record shows, and as anyone familiar with this region knows, electrification of the unserved rural areas is a practical objective only as the ultimate stage of an integrated system, interconnecting all of the cities, villages and communities in the area (Stanley R. 937-8; Longley R. 973) and even then the total demand represented by such rural markets will be an insignificant part of the total power demand essential to support such a system.

(b) *New industrial consumers.* Appellees also stress the claim that TVA's large industrial contracts represent a new demand not previously served by appellants and that

¹ These rural systems, fostered, subsidized and served by TVA, have been made the excuse for extension of TVA transmission to or near the larger towns which are the load centers of appellants' systems (see Comp. Exs. 332-A*, 199*, 205* to 210* and 326*), and although such lines could be served by appellants without substantial changes in appellants' present facilities (Add. Fdg. 119, R. 706), their principal significance arises not from their importance as a market for power but from their effect in restricting the normal development of efficient and economical electric service in the areas involved (Add. Fdg. 122, R. 707) and from the damage caused through the establishment of subsidized rates throughout appellants' territories.

to have served these customers appellants would have had to provide additional generating and transmission capacity.¹ (Appellees' Br. 111, 117-119.) Ignoring the unwarranted assumption that appellants are not damaged by competition for new or unattached business, a matter discussed in our main brief (p. 199) and unanswered by appellees, the fact remains that such sales do not assist either in making the benefits of TVA power "widely available" or in preventing its exploitation by a privileged few, and unless it is intended to be argued that the major part of the power to be produced in the future is going to be consumed by large corporations which move into this area for the purpose of securing subsidized TVA rates, the contention has no significance.

(c) *Previously unserved municipalities.* Again, appellees argue (Appellees' Br. 110) that a number of the present TVA municipal distributors previously owned and operated their own distribution or generating and distribution facilities. The record shows that at the present time there are only a few small municipalities which are still operating municipally-owned facilities with local power generation. For example, in the territory of The Tennessee Electric Power Company there is now only one such municipality (R. 781-2) as against 450 towns taking Company service. (Fdg. 6, R. 585.) In the territory of the Alabama Power Company there are three such towns (R. 864) as against 594 towns taking Company service. (Fdg. 16, R. 592.)

Naturally towns having their own distribution systems were among the first to enter into contracts to secure cheap

¹ It is not true, as claimed, that appellants did not previously serve some of this industrial load. (Add. Fdg. 117, R. 704.) In any efficiently operated system to avoid the cost and maintenance of idle capacity, it is always the practice to provide for the requirements of any large new industrial load after it is known where and when the customer will require it. (Miller R. 1119.)

TVA power, but the total present demand of all such TVA customers is only 11,461 kw. (Comp. Ex. 919, R. 3947), and it will not be claimed even by appellees that the scattered and relatively unimportant markets represented by the few remaining towns which still generate their own electric power would absorb more than a fraction of the power capacity of any one of the eleven TVA dams.

(d) *Prospective increases in power demand on the part of appellants' customers.* Another suggested source of demand for TVA power is the predicted increase in electric consumption on the part of appellants' present customers. Thus appellees state:

"As shown by the evidence and found by the court, it is to be anticipated that the utilities within ready transmission distance of the Authority's run-of-river plants will require 310,000 kw. of additional capacity in 1939 and 787,500 kw. by 1943." (Appellees' Br. 54.)

The above figures are taken from Finding 231 (R. 650), based upon the testimony of appellees' witness Thomas, and the statement quoted from appellees' brief, as well as the use to which it is put, is a flagrant example of compounded errors.

No testimony was offered by appellees as to any existing or prospective power shortage within transmission distance of any of the TVA dams. The testimony of the witness Thomas was predicated upon an alleged study of four groups of affiliated electric utility companies operating in the Southeast, including not only the properties of the appellants which lie beyond a radius of 250 miles from any TVA dam, but also the properties of eight non-complainant companies, many of which lie partially or wholly outside of such area. (Def. Ex. 133, R. 4150.) In reaching the conclusion that there will be a power shortage of the magnitude referred to in the territories served by these complainant and non-complainant companies (and hence a power short-

age of an obviously lesser but unestimated magnitude in the territory capable of being served by the TVA power system), the appellees' witness made the following omissions and patently absurd assumptions. The witness omitted:

All generating capacity added by any of the companies since 1936 (R. 2122) as well as all generating units now under construction or on order (R. 2120); all run-of-river hydro plants, without regard to firm capacity and existing regulation of stream flow, including such plants as Hales Bar on the Tennessee River between Guntersville and Chickamauga (R. 2112), and all stand-by steam plants, used only as reserve capacity and maintained for the very purpose of emergency use. (R. 2099, 2111.)

Having made the foregoing omissions the witness then assumed:

That the companies under consideration, whether operating within the area threatened with TVA competition or operating wholly outside of that area, will not construct any additional generating capacity for the next six years (R. 2098, 2119-20); that electric demand would increase at the average rate of $7\frac{1}{2}\%$ per year (R. 2119) and that the increase for 1937 would be $9\frac{1}{2}\%$ although the demand for 1937 actually showed a decrease of 9% (R. 2118); that at the time of maximum peak demand, in an extreme dry year, there would be an outage of $1\frac{1}{2}$ times the largest generating unit in each of the interconnected systems (R. 2128); that at the same time, all of the remaining steam plants could only be operated at 85% of their normal load carrying ability (R. 2099, 2128); that concurrently there would be a failure equivalent to 5% of the systems' transmission capacity (R. 2128), and that all of these coincidences would come at a time when all neighboring systems were also at peak and could not be required to deliver power over established interchange connections. (R. 2122-24.)

The witness did not say that it would be prudent or permissible under existing regulations for any operating company to maintain as a part of its rate base the surplus generating capacity suggested by the above omissions and assumptions, and the necessity for doing so is belied by the experience of all of the appellants, as shown by the testimony of those actually in charge of the operation of appellants' generating facilities. (Sporn R. 1259, 1252-3, 1257; Rankin R. 1296; Middlemiss R. 1271.) To that extent the court's finding as to future inadequacy is in direct conflict with its further finding that appellants have never refused additional business due to lack of facilities and that in the past appellants' facilities have always been adequate to meet their load requirements. (Fdg. 116, R. 627.)

These glaring errors of fact, assumption and interpretation are now sought to be turned to advantage by a pretended showing that as a result of the alleged impending power shortage the appellants will in some way be benefited, or at least will not be injured, by the TVA power program. In the absence of TVA competition and under normal business conditions, it is to be assumed that there may be some normal increases in the electric power demand within the systems of the appellants and that under such normal conditions, as in the past, additions and extensions will be provided to take care of such additional business. However, the repeated suggestion that the increased customer demand within the systems of the appellant companies is a factor to be considered as bearing upon the practical or legal questions involved in this suit, is irrational and specious, as a brief analysis will show.

The future power demands, represented by rural areas, new business enterprises and normal increases in customer consumption, are scattered over an area which is coextensive with the territories served by the appellants. If these power demands are to be served directly by TVA or its

distributors, TVA must construct a transmission system which duplicates and competes with the transmission facilities of the appellant companies themselves. If, on the other hand, these power demands are not to be served directly by TVA or its distributors, their significance depends upon the untenable assumption that TVA proposes to sell to the appellants the power now being generated and to be generated by it. No suggestion of that possibility could be made in good faith in view of TVA's competitive policy and the terms of the Act. (Appellants' Br. 177.)

It is thus seen that the court's findings with reference to potential power demands and unserved markets are only material in connection with the fact, confirmed thereby, that in order to dispose of the power which will be produced by TVA and in order to reach the markets where these demands exist, TVA must construct a competitive transmission system comparable with the combined systems of the appellants and extending over a large part of their territories. Certainly these findings have no relation to the subject of damages. It does not mitigate appellants' damages to say that since TVA will deprive appellants of a part or all of their present business, appellants will thereby be "saved" from the necessity otherwise arising of extending and enlarging their facilities to provide for the growth of the business so appropriated.

(e) *Duplication of facilities.* Appellees say that the existing TVA transmission lines do not duplicate transmission facilities of appellants (Appellees' Br. 111), which the majority of the trial court found (Fdg. 184, R. 640), upon the grounds that TVA's competitive facilities "*constitute useful and valuable additions to those (appellants') facilities.*" That they are neither useful nor valuable to appellants, whose facilities will be thereby displaced, is self-evident. (Add. Fdg. 121, R. 706.) By way of illustration,

the record shows that over one-third of the business of The Tennessee Electric Power Company is represented by the City of Chattanooga. The Company now has five high tension transmission lines serving it, and the loss of the business in Chattanooga will result in the destruction of over one-third of the usefulness of the Company's electric property. (Add. Fdg. 113, R. 701; Miller R. 1105-6.)

C. THE APPELLEES' CONTENTION THAT THE FEDERAL POWER TO DISPOSE OF PROPERTY IS IN EFFECT UNLIMITED AND SUBJECT TO NO RESTRICTION UNDER THE EXPRESS PROVISIONS OF THE CONSTITUTION, OR UNDER THE INHERENT LIMITATIONS OF OUR CONSTITUTIONAL SYSTEM, IS PLAINLY UNSOUND. (Answering Appellees' Br. 113-127; 134-160.)

The appellees do not discuss the meaning of the grant of power to dispose of property in the light of its history, in the light of its plain language or in the light of our constitutional system. They recognize no limitations upon this power either by virtue of its language, the express provisions of the Constitution or the inherent limitations of our constitutional system. They can not do so and still argue that the method of disposal authorized by the TVA Act and embodied in the TVA Unified Plan is within the constitutional power of the Federal Government. The effect of appellees' contentions is (a) that the power to dispose of federal property includes the power to engage in the conduct and management of any competitive commercial business so long as it in some degree utilizes Government property; (b) that in the conduct and management of such a business, it may enter the domain of the States and not only set aside, but itself affirmatively exercise, such State police powers as it chooses; (c) that engaging in such businesses and regulating intrastate concerns are not only within the scope of this federal power, but that the exercise of this authority and of these State police powers are not in any

degree circumscribed or controlled by the express or inherent limitations of our constitutional system or by the rights of the States and of the people under the Ninth and Tenth Amendments; (d) that it may take over as a federal monopoly the businesses in which the people have a right to engage and earn a livelihood within the States; and (e) finally, that in any event the consent of a State, whether purchased with *quasi* gifts of federal property or otherwise, confers powers on the Federal Government to engage in such businesses within State domain, condones the violation of the inherent limitations of our dual system of government, and sets at naught the rights which were retained by the people under the Ninth Amendment.

1. **Appellees misinterpret the scope of the previous decisions relating to TVA.** Notwithstanding the limited scope of the decision in the *Ashwander* case (a limitation insisted upon by the Solicitor General and counsel for TVA in argument before this Court) and the explicit statement of this Court that it expressed no opinion as to the status of any other dam or power development in the Tennessee Valley, whether connected with or apart from the Wilson Dam, or as to the validity of the Tennessee Valley Authority Act, or as to the power development promulgated by the Authority, appellees now insist that the *Ashwander* decision supports their revolutionary position. (Appellees' Br. 113-116, 139-141.) This contention is not based upon any principle laid down in the *Ashwander* case. Indeed, appellees ignore the limitations on the power to dispose of property pointed out in that opinion. They rest their contention solely upon the claim that the contract under examination in the *Ashwander* case involved every kind of electrical facilities and that such facilities were useful to serve a local market in which might be found customers falling within the usual classifications of utility service.

The unsoundness of this contention both in fact and law has been shown in our principal brief, pp. 187-190.

Appellees repeatedly cite the decision on motion for preliminary injunction in *Georgia Power Co. v. Tennessee Valley Authority*, 14 F. Supp. 673, to the effect that the disposal of electricity in new markets is "most considerate of existing interests." (Appellees' Br. 117, 119, 138.) Judge Sibley's remarks concerned a small rural line extended into an area not previously served. The attempted inference that the vast quantity of power being created and to be created by TVA is to be, or can be, sold to new markets, is indefensible. (See pp. 73-79, *supra*.) And if it were possible, as it is not, to market the TVA power by depriving appellants of all increment of business growth in their service areas for the next fifty years, it would not add a jot to the power of the Federal Government, nor would it avoid the irreparable injury to appellants. The opportunity for growth is the very life blood of any business and this is particularly true in the case of a natural monopoly such as the business of supplying electricity to the public.

2. Appellees misconstrue the cases relating to the power to dispose of government property as they apply to the utility business of TVA. The principal argument advanced by appellees to support the method of disposal authorized by the TVA Act and embodied in the TVA Unified Plan is that such method of disposal is necessary to avoid monopoly, to prevent waste and to secure wide distribution of the benefits of public property. (Appellees' Br. 120, 121, 122, 135, 137, 145.) In support of this proposition appellees cite *United States v. Trinidad Coal Co.*, 137 U. S. 160; *Camfield v. United States*, 167 U. S. 518; *United States v. Shryock*, 162 Fed. 790; *United States v. Hanson*, 167 Fed. 881; *United States v. Munday*, 222 U. S. 175;

Morton v. Nebraska, 21 Wall. 660; *United States v. Sweet*, 245 U. S. 563.

The *Trinidad Coal* case dealt with fraud in the entry of coal lands. The *Camfield* case dealt with the power of the United States to prevent individuals, not purchasers, from taking exclusive possession of unsold public lands "so long as such power is directed solely to its (the Government's) own protection." (loc. cit. 525-6.) The *Shryock* case dealt with liability of the defendant for rental on a lease of water power at a navigation dam. The *Hanson* case dealt with the power of the Federal Government to cooperate with private owners in a project involving the irrigation of public lands and held that this was valid "so long as it (the Federal Government) does not interfere with State legislation over waters of the State." (loc. cit. 884.) The *Morton* and *Sweet* cases merely illustrate the fact that the Federal Government in disposing of public lands has followed the policy of reserving known mineral deposits.

We have found, and appellees cite, no case which holds that a desire of the Federal Government to prevent monopoly, to avoid waste or to secure widespread distribution of actual or supposed benefits of federal property constitutes authority for the Federal Government to engage within State domain in business inconsistent with the functions of Government, to displace the police powers of the States in the regulation of local businesses affected with a public interest, or to establish within the States a federal policy of having such businesses carried on by public or non-profit organizations. No case holds that such a desire authorizes the Federal Government to establish a federal province which is neither State nor nation, and in which the Federal Government exercises all of the powers of the nation, the States and the reserved powers of the people as the ultimate sovereign.

But the whole contention is patently unreal. "Don Quixote never waged battle against as unreal a foe as is this ghost" of monopoly of the State-regulated business of supplying electricity to the public. The business of supplying electricity to the public is a natural monopoly; and duplication of facilities and competition is inimical to the public interest. (Pond, *Public Utilities*, Secs. 271, 903; *State v. Kansas City Gas Co.*, 254 Mo. 515; *State v. Interstate Power Co.*, 118 Neb. 756.) And not only is the business a natural monopoly and necessarily so in the interests of the public, but it is a regulated business. It is primer law that a utility purchasing all or part of a utility commodity supplied to the public, whether electricity or other, may only include in its operating expenses the price which it paid for the commodity and may collect no profit upon its purchase. Its charges are limited to its operating expenses plus a fair return on the property used and useful in serving the public. The plain result is that if the electricity were sold to a utility, the advantages of the purchase price, if any, would necessarily be passed on to the consumers. It is further obvious that the benefits of the power, if any, would be distributed most widely by sale to existing public utility systems. There is no analogy between the sale of a commodity like electricity to a regulated public utility, which may make no more than a fair return for its services in transmission and distribution, and the sale of public lands or mineral deposits which are not natural monopolies and the benefits of which are not passed on to the public without profit. The argument is specious and utterly divorced from realities. Indeed, the TVA Act should be entitled: A Bill to Establish a Federal Monopoly of the Business of Supplying Electricity to the Public in the States touching the Tennessee River Basin.

There is no rational explanation of the method of disposal provided in the Act and in the TVA Unified Plan

except a desire to substitute federal regulation and federal operation of the electric business for private operation and State regulation. Unlike matters involving the sale of public lands, this is a permanent federal undertaking. The property does not pass into the domain of State control and the normal current of business within the States. On the contrary, the TVA Act provides for a continuing and permanent interference with the functions of the State. If, in the cases cited by appellees, the Federal Government had undertaken to say that public lands once owned by the United States should never be held within the States in larger tracts than 160 acres, that they should never be sold at a price exceeding that paid to the Government and that they should never be subject to the debts of the owner, they might with some plausibility be urged as bearing on the instant case. But if the Government had attempted to impose such a continuing and permanent interference with the powers of the States, the attempt would plainly have been unconstitutional.

The appellees also cite fragmentary phrases from various cases in which this Court has remarked that federal property is held in trust. (Appellees' Br. 120.) *United States v. Trinidad Coal Co.*, 137 U. S. 160, 170; cf. *Light v. United States*, 220 U. S. 523, 537; *United States v. Beebe*, 127 U. S. 338, 342; *Camfield v. United States*, 167 U. S. 518; *Ruddy v. Rossi*, 248 U. S. 104, 106-107; *United States v. Gratiot*, 14 Pet. 526, 538.

These cases plainly afford no legal precedents for the validity of the TVA enterprise. The fact that the Federal Government holds property in trust and not like a private individual or an absolute monarch, adds nothing to the things which it may do under its power of disposal. The Federal Government holds property in trust for the performance of governmental functions and for disposal when no longer needed for those purposes. A trustee for the

disposal of property is not a trustee for the establishment and management of a business and the United States is not a trustee for establishing and carrying on commercial enterprises at the risk and expense of the people of the United States. Moreover, the appellees insisted in the court below and now insist in their brief (p. 222) that they are authorized to sell electricity below the costs of production. If this property is "held in trust for *all* of the people," it is a peculiar innovation of the law of trusts which authorizes the trustee permanently to carry on a business at a loss for the benefit of part of the *cestuis* at the expense of the remainder. Among the people which the appellees contend the Federal Government is entitled, as trustee, to supply with electricity produced at a loss and at the expense of the taxpayers generally are the Aluminum Company of America, the Monsanto Chemical Company, the Electro-Metallurgical Company, Volunteer-Portland Cement Company and the Victor Chemical Company. The trial court, on the objection of appellees, excluded proof that the TVA power could have been sold to utilities for distribution over existing systems with the greatest possible financial advantage to the Government and the widest distribution of the benefits, if any, among the people. (Appellants' Br. 177.)

3. The power to dispose of government property does not authorize the entry into permanent commercial businesses unrelated to any governmental function. The appellees argue that the Federal Government can not be denied the right to engage in a competitive commercial business, citing cases involving the utilization of privately owned or government owned corporations for the purpose of carrying out some affirmative function of the Federal Government. (Appellees' Br. 124-5.) This manifestly is no answer to appellants' conten-

tion that the power to dispose of property in terms does not authorize the Federal Government to enter into competitive commercial businesses within the States, to exercise regulatory powers over matters of intrastate concern, or to control and regulate matters of State policy. None of the cases cited by appellees involved the establishment of the Federal Government in permanent commercial businesses within various States in competition with their citizens.¹ Here, as elsewhere, the appellees cite statutes which have never been the subject of judicial examination. While these may or may not be proper exercises of constitutional power, it is plain that the existence of statutes on the books, which have not been challenged either for lack of incentive or lack of a party to raise the question, can not be construed as destroying the constitutional rights of citizens under a proper interpretation of the Constitution.² *Myers v. United States*, 272 U. S. 52, 170-171; *United States v. Boyer*, 85 Fed. 425, 432.

¹ *McCulloch v. Maryland*, 4 Wheat. 316; *First National Bank v. Fellows*, 244 U. S. 416; *Smith v. Kansas City Title & Trust Co.*, 255 U. S. 180, merely sustained the power of the Federal Government to charter banks as fiscal agencies of the Federal Government and in no way involved the entry of the Federal Government into a permanent commercial business and much less one unrelated to its constitutional functions. *King County v. Fleet Corp.*, 282 Fed. 950; *Sloan Shipyards v. Fleet Corp.*, 272 Fed. 132; *Fleet Corp. v. Western Union*, 275 U. S. 415 and *New Brunswick v. United States*, 276 U. S. 547, dealt merely with emergency exercises of the national defense powers in time of war or the bona fide liquidation of a bona fide war enterprise. *Wilson v. Shaw*, 204 U. S. 24, involved the construction and operation of the Panama Railroad in exclusive federal domain under the foreign commerce and national defense powers and involved no possible conflict with the reserved rights of the States. *Standard Oil Co. v. Lincoln*, 144 Neb. 243, involving the power of a municipality to establish a gasoline station obviously has no application to any power of the Federal Government.

² Appellees in particular assert that the method of disposition of power at Boulder Dam does not differ materially from

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The appellees pass over the fact (pointed out in Appellants' Br. 136-7) that under appellees' contention the Federal Government could make its ownership of oil, coal, natural gas, forests and agricultural lands the basis of establishing nation-wide competitive commercial businesses free from State taxation, regulation and control and in displacement of the rights of the people to engage in such businesses with the statement that "it is unnecessary to elaborate the obvious distinctions (still congealed in the hearts of the appellees) between the instant case and those suggested by appellants." (Appellees' Br. 126.) The fact is that if the appellees' contentions are sound, the mere implementing power to dispose of federal property has substantially destroyed our dual system of Government. Thus, water power (before conversion into electricity) is merely mechanical energy. Coal is likewise merely energy which may be converted into electricity. If the appellees' contentions are sound, the Government by virtue of its ownership of coal deposits in the public domain may install equipment to convert the energy of the coal into electricity just as it may install generators to convert the water power into electricity, and having converted the energy of the coal into electricity, it may engage in the business of supplying electricity to the public throughout the nation.

In this connection, it should be observed that the appellees seek to create the impression that appellants merely argue that the power to dispose of property is limited only

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that involved in the instant case. (Appellees' Br. 141-145.) Were this true, it would be clearly irrelevant in view of the fact that this Court has never passed upon the validity of provisions of the Boulder Canyon Project Act (45 Stat. 1057) with respect to the disposition of power. However, a comparison of that Act with the analysis of the TVA Act (Appellants' Br. 14-17) discloses that appellees' contention is untrue; and a comparison of the TVA Unified Plan with the administrative action under the Boulder Canyon Project Act will disclose a similar lack of analogy.

by the Tenth Amendment. (Appellees' Br. 126.) The appellants have made clear in their main brief that they contend, *first*, that the grant of power to dispose of property according to its terms does not include any power to engage in a commercial competitive business within the States or to regulate matters of intrastate concern; and *second*, that regardless of the language of the power, it, like all granted powers, is subject to the limitations not only of the Tenth and other Amendments, but to the inherent limitations of our dual constitutional system. (Appellants' Br. 133-144.)

4. The power to dispose of government property does not authorize the supplanting of the State police power over electric rates and service. The appellees say that their control over the distribution of TVA electricity by municipalities and cooperatives, and their fixing of resale rates are a proper activity of the Federal Government because indirectly it increases the demand for TVA electricity. (Appellees' Br. 132.) The federal desire to regulate local rates can only be based upon either the assumption that State regulation of local electric rates is inadequate or does not suit the views of the federal agency, or upon the circumstance that the appellees are requiring distribution of their power at less than cost. But obviously the relationship is too remote to permit the intrusion of the Federal Government into State domain. On the oral argument in the *Ashwander* case, Mr. O'Brian, then and now counsel for the Tennessee Valley Authority, said:

"Mr. Justice Butler: And how about the sale of appliances in order to provide a market for the electricity so incidentally produced?"

Mr. O'Brian: I do not think that is constitutional, your Honor." (Transcript of Argument 135-6.)

In support of this contention, appellees also cite *Oregon & California R. R. v. United States*, 238 U. S. 393 and *United States v. Gratiot*, 26 Fed. Cas. 12, aff'd. 14 Pet. 526.

The *Oregon & California Railroad* case involved a grant of land to promote the construction of a railroad and the settlement of an uninhabited area. The restrictions on the size of the tracts in which and price at which the donee might sell the land was a condition which could have been imposed by any private owner. It involved no continuing interference with the powers of the States and bears no colorable analogy to the TVA enterprise involving a permanent commercial business and permanent interference with the rights of the States and the people. *United States v. Gratiot* was a suit upon a bond securing a lease. The question certified to this Court was whether the President had power to make the lease, and the bond and the lease are accordingly printed in full in the report of the case in this Court. Neither contains any provision with reference to resale price and it seems quite obvious that the statement of Mr. Justice McLean on circuit was a dictum responsive to some argument made below. But in any event, it is plain that Mr. Justice McLean did not lay down the principle that the United States in the exercise of its power to dispose of property could engage in the business of regulating matters reserved to the States. Mr. Justice McLean said:

"The argument is not sustainable, that if the United States may do this, they may engage in any other traffic, within a state, and regulate prices at pleasure. This consequence does by no means follow." (loc. cit. 13.)

Appellees also argue that the powers reserved to the States are not invaded because the distributors of TVA power, but not TVA, are subject to State control. (Appellees' Br. 134-139.)¹ But to the extent that TVA has the

¹ Appellees' contention that appellants have no standing to challenge the validity of the resale rate provisions in the contracts between TVA and municipalities and cooperatives (Appellees' Br. 127-134) is answered in the section dealing with the right to sue at pp. 110-111, *infra*.

constitutional authority to engage in this business and in these activities, it is immune from State control. (Appellants' Br. 151-152; *Arizona v. California*, 283 U. S. 423, 451.) In *United States v. Butler*, 297 U. S. 1, substantially the same argument was advanced, that federal control of local crop production was proper because the States might forbid the farmers to enter into the contracts for crop restriction (p. 74), or that the farmers might voluntarily decline to enter into such contracts (p. 70), and the argument was rejected by this Court. In *Savings & Loan Association v. Cleary*, 296 U. S. 315, the Federal Government was not permitted to convert a State agency into a federal agency in contravention of State laws. In that case, the power of the Federal Government to establish such an agency was unquestionable. In this case, the Federal Government is plainly without power to do the thing it seeks to do; and it is immaterial whether or not State agencies might refuse to become an instrumentality of its unconstitutional enterprise. The appellees apparently concede that TVA, after creating a state of complete public dependence upon its service and facilities, may withdraw from the State and that the State is powerless to protect its citizens in the premises. (Appellees' Br. 136.) The only answer appellees are able to make is that in their judgment they have spent so much money, or will spend so much money, in the Tennessee Valley that they will permanently commit the Federal Government to carrying on the electric utility business.

Appellees also argue that their control of retail rates raises no constitutional question. (Appellees' Br. 146-154.) The real basis of their argument is that State consent, claimed to have been procured by various State Acts, cures this objection. In our principal brief we have examined this question and shown, *first*, that no State consent can grant power to the Federal Government; and *second*, no State

may waive the inherent limitations of our constitutional system in matters such as these which involve the very essence of Statehood. (Appellants' Br. 144-147, 180-186.) The appellees do not discuss these questions; they refer to the right of municipalities, under State authority, to make binding contracts with utilities for a reasonable time. (Appellees' Br. 151.) The obvious and controlling distinction is that if the United States is acting constitutionally, its power is paramount and not subject to State regulation, that the State may not delegate its power of regulation to another government (I *Cooley's Constitutional Limitations* (8th ed.) 224), and that the political agencies of the States, like the States themselves, may not contract away the inherent limitations of our constitutional system or grant constitutional power to the Federal Government.

In *Steward Machine Co. v. Davis*, 301 U. S. 548, the Federal Government had power to provide the social security benefits without regard to the States. The statute provided a method of State cooperation within State constitutional power. Here the Federal Government has no constitutional power to carry on the TVA enterprise, the TVA Act is not conditioned upon any action by the States, and contrary to the situation in that case (see quotation, Appellees' Br. 151), the restrictions are imposed by contract.

At page 153 of their brief, appellees argue that the statutory and administrative purpose to regulate appellants' rates is negated by the fact that they have made contracts with consumers not served by appellants. Laying to one side the fact that in most cases this represents a taking of prospective customers of the appellants, the fact that the appellees' regulatory activities extend over a wider area than the service areas of appellants and include the service areas of other utilities in no way

negatives the plain and obvious fact that the purpose of both the Act and the administrative plan is to regulate appellants' rates. The fact that they also regulate other rates and that their ambitions are wider than the operations of appellants confirms rather than negatives the statutory and administrative purpose.

IV.

THE APPELLEES' CONTENTIONS THAT APPELLANTS HAVE NO RIGHT TO SUE ARE UNFOUNDED. (Answering Appellees' Br. 160-192; 127-134.)

Appellees challenge appellants' right to sue in all, or some, aspects of this suit upon the grounds (1) that appellants do **not** possess non-exclusive franchises to carry on the business of supplying electricity to the public; (2) that TVA has been granted valid franchises or exemptions under State law in *some* of the States in which appellants operate; (3) that the extension of the TVA power operations into the service areas of some of the appellants, inevitably involved in the execution of the unitary TVA Unified Plan, has not yet become a *fait accompli*; (4) that some of the appellants are estopped; (5) that appellants' damages flow from the legal competition of municipalities and cooperatives; and (6) that appellants have no standing to challenge the validity of the regulation of the retail rates of distributors of TVA power as an integral part of the statutory and administrative scheme to regulate local electric rates, including those of appellants. (Appellees' Br. 160-192, 127-134.)

We shall briefly examine these contentions in the order stated, but we here invite attention to the fact that appellees have made no attempt to deny the right of appellants to sue to vindicate their right to engage in and carry on the business of supplying electricity to the public within

the States free from displacement by the Federal Government and free from federal interference, regulation or control. (Appellants' Br. 148-150, 210-211.) Nor have they challenged the analogous right of appellants to sue to prevent destruction of their businesses through the establishment of a federal policy within the States of having the local electric business carried on by publicly owned and non-profit bodies. (Appellants' Br. 175-177.)

A. APPELLEES' CONTENTIONS (1) THAT APPELLANTS DO NOT POSSESS NON-EXCLUSIVE FRANCHISES TO CARRY ON THE BUSINESS OF SUPPLYING ELECTRICITY TO THE PUBLIC AND (2) THAT TVA HAS BEEN GRANTED VALID FRANCHISES OR EXEMPTIONS UNDER STATE LAW, ARE WITHOUT SUBSTANCE.

1. *Each of the appellants is a public utility corporation duly qualified to engage as a public utility in the business of generating, transmitting, distributing and selling electricity, or distributing and selling electricity, or transmitting and selling electricity as a public utility in the State or States in which it operates.* (Fdgs. 1, 6-23; R. 585-598; Comp. Ex. 2, R. 2450.) These State franchises do not confer merely the right to do business as a corporation, as appellees assert at page 170 of their brief, but *they confer the right to do business "as a public utility."* In addition, each of the appellants holds franchises, licenses or easements (conceded for the purpose of this suit to be non-exclusive) for the distribution and sale of electric energy within the corporate limits of municipalities and, where required, within substantially all the counties in which it operates. (Fdg. 28, R. 599; Comp. Ex. 3, R. 2453.)

Appellees argue that municipal and county franchises confer only the privilege of occupying the streets and highways with electric facilities. (Appellees' Br. 166-170.) This is an utter misconception of the rights which appel-

lants enjoy. The power to grant local franchises resides primarily in the State and may be exercised directly¹ or delegated to political subdivisions of the State.² In the latter case, two things are essential to the local operation of an electric utility business: (a) a franchise from the State to engage in business "as a public utility" and (b) the consent of local authorities to the use of the streets and highways for facilities to carry on such business. *Owensboro v. Cumberland Telephone Co.*, 230 U. S. 58, 65; *Mayor of Knoxville v. Africa*, 77 Fed. 501, 507-8. In either case, that the franchise to carry on a public business is a property right, capable of assignment, sale and mortgage, and entitled to the guarantee of protection afforded property rights and contracts under the Constitution, has been sustained by an unbroken line of authorities in the federal courts³ and in the courts of the States in which TVA is operating or threatening to extend its operations.⁴

¹ Thus, while appellants operating in Mississippi and Alabama have local franchises, both States have granted directly the right to occupy streets and highways and such local franchises are unnecessary. Miss. Code (1930) §§ 1505, 1506; Ala. Code (1923) § 7197.

² *Walla Walla v. Walla Walla Water Co.*, 172 U. S. 1, 9; *Owensboro v. Cumberland Telephone Co.*, 230 U. S. 58, 65, 67; *Wright v. Nagle*, 101 U. S. 791, 794; *Hamilton G. L. & C. Co. v. Hamilton*, 146 U. S. 258, 266; *New Orleans Water Works Co. v. New Orleans*, 164 U. S. 471, 481; *Mayor of Knoxville v. Africa*, 77 Fed. 501, 507; *City of Chattanooga v. Tennessee Electric Power Co.*, 172 Tenn. 524; *Railroad Co. v. Brigham*, 87 Tenn. 522.

³ In addition to the cases cited at Appellants' Br. 196, see: *Walla Walla v. Walla Walla Water Co.*, 172 U. S. 1, 9; *Detroit v. Detroit Citizens St. Ry. Co.*, 184 U. S. 368, 394; *Owensboro v. Cumberland Telephone Co.*, 230 U. S. 58, 65; *Boise Water Co. v. Boise City*, 230 U. S. 84, 90; *Mayor of Knoxville v. Africa*, 77 Fed. 501, 507; *Georgia Power Co. v. Tennessee Valley Authority*, 14 F. Supp. 673.

⁴ *Memphis Street Ry. Co. v. Rapid Transit Co.*, 133 Tenn. 99; *Tennessee Public Service Co. v. City of Knoxville*, 170 Tenn. 40; *City of Chattanooga v. Tennessee Electric Power Co.*, 172 Tenn.

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In *Owensboro v. Cumberland Telephone Co.*, *supra*, this Court said: —

“That the grant in the present case was not a mere license is evident from the fact that it was upon its face neither personal, nor for a temporary purpose. The right conferred came from the State through delegated power to the city. *The grantee was clothed with the franchise to be a corporation and to conduct a public business, which required the use of the streets, that it might have access to the people it was to serve.* Its charges were subject to regulation by law and it was subject to all of the police power of the city.

“* * * As a property right it (the franchise) was assignable, taxable and alienable. Generally it is an asset of great value to such utility companies and a principal basis for credit.” (loc. cit. 65.)

Appellees argue that appellants do not come under *Frost v. Corporation Commission*, 278 U. S. 515, because the non-exclusive franchise there involved took the form of a certificate of convenience and necessity and that the application of the *Frost* case depends upon a matter of terminology and not upon the substantive question whether the plaintiff has a non-exclusive franchise to carry on a public service. (Appellees' Br. 164.) But this Court in the *Frost* case took pains to demonstrate that a certificate of convenience and necessity was a form of franchise equivalent to franchises such as those of appellants, which had been recognized as property rights long before certificates of convenience and necessity originated. (loc. cit. 520.) The suggestion that a non-exclusive franchise expressed in

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524; *Princeton Power Co. v. Calloway*, 99 W. Va. 157; *McInnis v. Pace*, 78 Miss. 550; *Harrison v. Big Four Bus Lines*, 217 Ky. 119; *Harrell & Croft v. Ellsworth*, 17 Ala. 576; *Alabama Power Co. v. Cullman County Electric Membership Corp.*, 234 Ala. 396; *Smith v. Harkins*, 38 N. C. 613; *Bridge Co. v. Flowers*, 110 N. C. 382; *Commonwealth v. Portsmouth Gas Co.*, 132 Va. 480.

the terms of a certificate of convenience and necessity is a property right, but that a non-exclusive franchise for public service expressed in other terminology is not a property right, is plainly absurd. See *Louisville v. Cumberland Telephone Co.*, 224 U. S. 649, 661.

While immaterial for the reasons above stated, appellants which operate in Alabama, Tennessee, Kentucky, North Carolina, South Carolina and West Virginia do have what amount to certificates of convenience and necessity. There are statutes in those States which require certificates of convenience and necessity for the initiation or extension of utility service into municipalities or other areas served by another utility. (Alabama Code (1923) § 9795; Tennessee Code (1932) §§ 5502-04; Carroll's Kentucky Statutes (1936) §§ 3952-25; Michie's North Carolina Code (1935) § 1037(d); Acts of South Carolina, 1932, c. 871, § 2(w); Michie's West Virginia Code (1935) § 2562 (1). (11).) The effect of those statutes was to confer upon appellants and other utilities operating in those States at the date of passage of the respective Acts, protection against the invasion of their territory by anyone not holding a valid certificate of convenience and necessity for that purpose.¹ There is and can be no claim that since the passage of these statutes any of the appellants operating in these States have failed to procure any necessary certificates of convenience and necessity for any subsequent extension of their lines or expansion of their businesses (R. 833, 862; Comp. Ex. 88); nor can it be claimed that any of the appellants have failed to comply with the applicable statutory provisions neces-

¹ In addition, the approval of a franchise by the Tennessee Commission under §5453 of the Tennessee Code of 1932 constitutes a certificate of convenience and necessity (*Tennessee Eastern Electric Co. v. Hannah*, 157 Tenn. 582), and all franchises granted to appellants operating in Tennessee subsequent to the enactment of this statute have received the requisite approval. (R. 767-8, 797, 810, 833, 845, 851-2.)

sary to engage in and carry on the electric utility business in the territories in which they are operating. (R. 767-8, 788-9, 797, 806, 810, 830, 845, 851-2, 862; Comp. Ex. 3, R. 2453.)

2. We now deal with appellees' contention that TVA has been granted valid franchises or exemptions under State law.¹ Appellees erroneously assert that appellants do not contend that such alleged franchises or exemptions are invalid and imply that the only question is whether the alleged exemptions constitute a denial of equal protection of law under the Fourteenth Amendment. (Appellees' Br. 170, 172.) To the extent that such purported franchises or exemptions exist,² appellants challenge their validity upon even more fundamental grounds. Under our constitutional system, the States are without power to grant and the Federal Government is without power to accept a franchise or permit in the form of an exemption to engage in an undertaking within the States which is both unauthorized and forbidden by the Federal Constitution, which destroys the rights reserved to the people (and not the States) under the Ninth and Tenth Amendments, which is in violation of our dual constitutional system of government and which involves the surrender of the essence of Statehood. (Appellants' Br. 180-186.) These alleged franchises and exemptions are therefore void, just as was the exemption invoked by the defendants in the *Frost* case.

¹ There is no pretense that TVA has acquired franchises or has any statutory exemptions in Virginia, West Virginia, Kentucky, North Carolina or South Carolina.

² Appellees claim to have franchises in certain of the municipalities and counties in which they operate. (Comp. Exs. 214-223, 225-264, R. 3022-3026, 3026-3037.) There is no evidence, however, that TVA has a municipal franchise in any of the municipalities outside the so-called "ceded area" with which it has contracts for the sale of power except Fayetteville. The rights of appellants to challenge competition by TVA in these municipalities is discussed at Appellants' Br. 201-209 and at pp. 108-109, *infra*.

The appellees can not plead alleged franchises and exemptions in justification of their invasion of the non-exclusive franchises of the appellants and then successfully assert that the appellants have no standing to invoke a judicial determination whether such alleged franchises and exemptions are valid or void. Yet that is precisely what appellees have attempted to do.

Manifestly *Railroad Co. v. Ellerman*, 105 U. S. 166, is inapposite. In that case the plaintiff was the operator of a wharf who sought to enjoin the execution of a lease of a rival wharf by the railroad company on the ground that the use proposed by the lease was beyond the corporate power of the railroad company to grant. It appears from the report of the case that the plaintiff, who was an individual, had no property right, in the form of a franchise or otherwise, which could be protected in a court of equity. He had acquired only such rights as had been assigned to him by the city, whose right to build wharves and collect tolls on the land of the railroad company had been revoked by the State legislature from which all rights of the city were derived. Such being the facts, the Court inquired whether the plaintiff had any "legal interest" which would entitle him to enjoin the railroad company from the consummation of an *ultra vires* act, and the Court merely held that since Ellerman had no legal interest to protect, he could not question the powers of the corporation, as only a stockholder or the State had sufficient legal interest to raise the question of *ultra vires* under these circumstances. The case is only one of many which hold that only the State, stockholders and, in some instances, creditors may question the violation of powers contained in a corporate charter. It plainly does not apply in a case where appellants have non-exclusive franchises which are entitled to protection from unlawful competition.

That *Alabama Power Co. v. Ickes*, 302 U. S. 464, lends no support and is indeed irrelevant to this contention of appellees is too clear to warrant discussion. Appellants' analysis of the *Alabama* case in their main brief, which appellees have not even attempted to answer, plainly sustains appellants' right to sue in all aspects of this case. (Appellants' Br. 211-214.)

B. APPELLEES HAVE MADE NO ANSWER TO THE RIGHT OF APPELLANTS TO SUE UNDER THE NINTH AND TENTH AMENDMENTS.

This right is discussed in our main brief at pp. 148-150, 210-211. It is an entirely separate right which does not depend upon the existence or validity of franchises, although franchises are one of the property rights which individuals are entitled to protect. It depends upon a direct invasion by the Federal Government of the right of the people to be protected in the rights of local self government and to engage in and carry on intrastate businesses free from being displaced by the Federal Government taking over the business as a federal monopoly and free from federal regulation or control. These rights were reserved to the people and not to the States under the Ninth and Tenth Amendments. The right to sue in these circumstances is supported by a long line of authorities in this Court which has sustained the right of individuals to sue to enjoin unconstitutional federal interference with, or regulation of, the rights and property of the people. No more here than in those cases can it be said that the individual is without right to sue because a State which has jurisdiction in the premises might conceivably impose regulations similar to those sought to be imposed by the Federal Government without jurisdiction and without constitutional authority.

C. APPELLEES' CONTENTION THAT SOME OF APPELLANTS ARE NOT THREATENED WITH DIRECT AND SPECIAL DAMAGE IS IN THE TEETH OF THE FINDINGS AND OF THE UNDISPUTED FACTS IN THE RECORD.

Appellees' contention (Appellees' Br. 175-177) that nine of the appellants are not threatened with direct and special damage is based on the circumstance that the extension of the TVA power operations into the service areas of some of the appellants, although inevitably involved in the execution of the TVA Unified Plan (Appellants' Br. 65-70; pp. 1-4, 71-80, *supra*), had not yet become a *fait accompli* at the time of the trial. The trial court expressly found that "*Substantial future damage to complainants will result from competition with TVA.*" (Fdg. 125, R. 628.) Appellees have not appealed from this finding, and it makes clear (a) that the future damage will be substantial, (b) that the damage extends to all appellants and (c) that the damage will result from competition with TVA. Similar statements of the trial court in its opinion (R. 552, 555) are referred to at p. 191 of appellants' brief. (See also Add. Fdg. 120, R. 706.)

The size of this unitary enterprise, the vast quantity of power to be created, and the limits of the available market incontestably establish that the power can not be marketed, as directed by the TVA Act and as being administered by appellees, without invading substantial parts of the market areas of all of these appellants. The very purpose of this suit is to prevent this threatened invasion. The suggestion that the scope of the right to sue and the scope of the right to relief are to be measured by the extent to which the wrongdoer has accomplished the wrong at the date of trial of a suit for anticipatory relief is manifestly untenable.

The appellees can not in good conscience make this contention. One of the companies named in the finding

upon which appellees rely, Holston River Electric Company (Appellees' Br. 175), had had its entire facilities and business taken over directly by TVA before the TVA brief was written. If this company had not been so taken over, we may assume that appellees would have made the same claim as to it. Since the date of trial, TVA and the City of Knoxville have acquired all the facilities of the Tennessee Public Service Company and TVA has extended its existing operations to the very edge of the market area of every other appellant. (See pp. 2-4, *supra*.)

As another illustration, appellees are engaged in constructing the Hiwassee power project and have scheduled for construction the Fontana power project, both of which are located in the service area of the Carolina Power & Light Company, one of the appellants with respect to which this claim is made. It is conceded that all of the TVA power projects are to be interconnected into one large grid system or power pool, a part of which will lie in the service area of the Carolina Power & Light Company. Do the appellees intend to ask this Court to believe that the extension of this vast grid system into the very service area of the Carolina Power & Light Company is for some undisclosed purpose but not to market any power in that area? This is apart from the fact that TVA has already taken away business of the Carolina Power & Light Company through taking over the supplying of electricity to the Volunteer Portland Cement Company and to the entire area formerly served by the Tennessee Public Service Company, which obtained its electricity at wholesale from the Carolina Power & Light Company. (Yoder R. 824-5; Comp. Exs. 118, 157, 158, R. 2808, 2891-2.)

The court below, without protest or objection by appellees, sought to restrict not only the scope but also the quantum of the proof offered by appellants on any issue and in

particular pressed the appellants not to offer any further proof of damage, on the ground that the court thought the threat of irreparable damage obvious and would assume damage to the appellants (R. 1259-60, 1266, 1414, 1470, 1483), and in their brief appellees strongly urge that the trial court properly excluded evidence as to the extent of damage to particular appellants on the ground that it was purely cumulative. (Appellees' Br. 224, 225, 240-244.) This is clearly an admission of damage.

Finally, special counsel for the TVA in his final argument before the trial court expressly stated: "We have conceded that a continuance of those lower (TVA) rates will work in competition a degree of damage to the Complainants" (Tr. 6366) and that "We differ (with appellants) as to the amount and extent of that damage (to appellants), but we have frankly conceded that damage will result." (Tr. 6367.)

There can be no question upon the basis of the foregoing that each of the appellants is threatened with direct and special damage from TVA competition and that appellees' contrary contention is wholly without substance. It is firmly established that in equity, "damage threatened, irremediable by action at law, is equivalent to damage done" (*Hitchman Coal & Coke Co. v. Mitchell*, 245 U. S. 229, 256; see also *Vicksburg Waterworks Co. v. Vicksburg*, 185 U. S. 65, 82), and that a threat of competition is a threat of irreparable damage. *Walla Walla v. Walla Walla Water Co.*, 172 U. S. 1, 12; *Frost v. Corporation*, 278 U. S. 515, 521.

D. APPELLEES' CONTENTION THAT CERTAIN OF THE APPELLANTS ARE ESTOPPED TO MAINTAIN THIS SUIT IS UNTENABLE.

Appellees' contention (Appellees' Br. 177-182) that appellants Alabama Power Company, Mississippi Power Company, The Tennessee Electric Power Company and Southern Tennessee Power Company¹ are estopped to challenge the validity of the huge unitary scheme known as the TVA Unified Plan for the creation of a vast quantity of firm or commercial power and its utilization to establish and operate the largest unitary public utility system in the United States is plainly untenable.

The fact is that since January 4, 1934, no power has been purchased from TVA by any of these appellants except under the January 4 contract (Def. Ex. 143A, R. 4195) and the closing agreement hereinafter referred to. (Def. Ex. 150, R. 4255-8.)

In the *Ashwander* case it appeared that the Alabama Power Company had purchased large quantities of power at Wilson Dam both before and after the passage of the TVA Act, during the period extending from 1925 to 1935. This Court held that the Alabama Power Company was not estopped and proceeded to determine that Wilson Dam was a constitutional structure as it then existed under the National Defense Act of 1916. The appellees insisted before this Court that the contract of January 4, 1934, to which three of these appellants were parties and upon which appellees rely as a basis for an estoppel, involved only Wilson Dam power. (Appellants' Br., App. pp. 67-8.) This Court so construed the contract and Alabama Power Com-

¹ Southern Tennessee Power Company is only a transmission company (Fdg. 112, R. 626) and was not a party to the January 4 contract. There is no evidence in the record to support appellees' assertion (Appellees' Br. 177) that it is an instrumentality of The Tennessee Electric Power Company.

pany necessarily accepted that construction. (Barry R. 873; Def. Ex. 150, R. 4258, 4261.) Both before and under the January 4 contract, the power taken by these appellants was taken at the dam¹ and involved no question of the validity of any other dam or of the method of disposal authorized by the TVA Act and now embodied in the TVA Unified Plan under which appellees are setting up a vast federally owned and operated electric utility system with the numerous invasions of the rights of the States and the people hereinbefore more particularly described. The absence of any relation between these transactions concerning Wilson Dam power delivered at the dam and the vast activities embraced in the TVA Unified Plan now in process of execution, is manifest.

The claimed excess in the quantity of power delivered to these appellants during the last 7 months of 1936 over the capacity of Wilson Dam as it was sustained by this Court is inconsequential (Def. Ex. 148, R. 4254), and moreover, if in accord with the facts, it is entirely due to conduct of appellees, over which these appellants had no control, in wrongfully increasing the capacity of Wilson Dam by the use of Norris storage and consequently forcing additional power over the inter-connection of these appellants at Wilson Dam. There is no evidence and not even a suggestion that these appellants ever consented, and much less requested, that TVA should use Norris storage to increase the capacity of Wilson Dam or should put Norris Dam power on the line. (Def. Ex. 150, R. 4258, 4261.)

Since the termination of the January 4 contract on February 3, 1937, the Alabama Power Company has been

¹ The amount of power purchased prior to January 4, 1934, was 2,899,728,786 kwh. and the amount purchased under the January 4 contract to December 31, 1936, was 946,412,788 kwh. (Def. Ex. 150, R. 4256, 4257.) From January 1 to February 3, 1937, the date of the termination of the contract, the amount was 13,325,083 kwh. (Def. Ex. 147, R. 4243.)

purchasing an insignificant amount of power from TVA at Wilson Dam, *in accordance with the closing agreement under the contract of January 4*, in order to supply urban properties in the so-called "ceded area" supplied by the secondary or marketing transmission lines sold to TVA under the contract. (R. 4258.) This power was supplied on a free interchange basis until November 3, 1937, since which time, also pursuant to the closing agreement, it has been purchased at the standard TVA rate for municipalities. This represents a clear case of necessity, as the Alabama Power Company, because of conditions beyond its control, had no choice but to make the arrangement. Cf. *Abie State Bank v. Bryan*, 282 U. S. 765, 776; *Union Pac. R. R. Co. v. Public Service Commission*, 248 U. S. 67, 70.

Appellees assert that these appellants "have affirmatively contributed to the execution of many of the acts of the Authority now complained of." (Appellees' Br. 178.) What activities the TVA has been induced to undertake by the action of any of these appellants is not disclosed. Surely the appellees do not intend to tell this Court that despite their efforts throughout 175 pages of their brief, to create the impression that the TVA Unified Plan is solely a navigation and flood control project, they in fact were induced and misled into embarking on that project solely because the Alabama Power Company, under the pressure of circumstances created by TVA, had been compelled to purchase a small quantity of TVA power to serve the isolated communities which the January 4 contract would otherwise have left without any electric service. As this Court stated in the *Ashwander* case, "estoppel in equity must rest on substantial grounds of prejudice or change of position, not on technicalities." (loc. cit. 323.)

The fact is that the primary benefits under the January 4 contract were derived by TVA and not by appellants.

The power required to be taken under the contract was "surplus" power (R. 4201) and the record is clear that TVA had no other market for the power and that it would otherwise have gone to waste. (Fdg. 172, R. 638.) Certainly, appellees will not be so bold as to claim that they have reserved power for these appellants or any other utility at the expense of any opportunity to go into the business directly or through their controlled distributors.

It is clear, as the trial court stated in its opinion (R. 544), that "the record presents no essential difference from the situation covered by the ruling as to estoppel in the *Ashwander* case," and that that decision effectively disposes of appellees' attempt to renew the point in this Court. As in the *Ashwander* case the contract in suit manifestly had a "broader range" than the earlier transactions, so in this case the scope of the challenged activities of TVA has an immensely "broader range" than the "limited undertaking" expressed in that contract, and it can not be said that there was anything in the contract which precludes the contention that such activities "go beyond the constitutional power of the Authority." *Ashwander v. Tennessee Valley Authority*, 297 U. S. 288, 323; cf. *Frost v. Corporation Commission*, 278 U. S. 515, 527-528.

Appellees cite *Great Falls Mfg. Co. v. Attorney General*, 124 U. S. 581; *Wall v. Parrot Silver & Copper Co.*, 244 U. S. 407; *St. Louis Co. v. Prendergast Co.*, 260 U. S. 469; but these cases are plainly not applicable here. *Ashwander v. Tennessee Valley Authority*, loc. cit. 323.

E. APPELLEES' CONTENTION THAT THE DISTRIBUTION OF TVA POWER THROUGH MUNICIPALITIES AND CO-OPERATIVES DOES NOT CONSTITUTE COMPETITION WITH APPELLANTS AND INVOLVES NO LEGAL INJURY IS WITHOUT MERIT.

That sales through municipalities are not only direct competition for wholesale business but also direct competition in the distribution of electricity within the municipalities is not open to debate. *Citizens El. Ill. Co. v. Lackawanna & W. P. Co.*, 255 Pa. 145; *Chicago v. Mutual Electric Light Co.*, 55 Ill. App. 429; see Appellants' Br. 201-203; *Holston River Electric Co. v. Hydro Electric Corp.*, 17 Tenn. App. 122, cert. den. Tenn. Sup. Ct., 66 S. W. (2d) 217; cf. *Holston River Electric Co. v. Hydro Electric Corp.*, 166 Tenn. 662.

Indeed, the Government brief in *Alabama Power Co. v. Ickes*, *supra*, signed by the Attorney General and Mr. Freund, of counsel in the instant case, stated with reference to the *Citizens El. Ill. Co.* case:

"* * * There the defendant, a utility company, with a franchise limited to a particular area, proposed to sell power, at wholesale, in a township in which it had no franchise to operate, and in direct unlawful competition therein with the plaintiff utility company which had a valid franchise covering that township. Plaintiff was granted an injunction. It happened that the proposed purchaser of the power from defendant was a third utility company which had a valid franchise to sell, at retail, in competition in that township with plaintiff. But the wrong complained of was the illegality of the *direct competition*, at wholesale, between plaintiff, having a valid franchise covering that territory and defendant, which had no such franchise."

Precisely the same principles apply to the distribution of TVA power through rural cooperatives. Hence the right to sue in this aspect exists apart from the fact that, while

the existence of such a relationship is not an essential of appellants' right to sue, the municipalities and cooperatives are in reality mere agents for the distribution of TVA power; and that in any event, TVA so far controls and participates in sales by distributors that the validity of its participation may be tested at the suit of an injured party. (Appellants' Br. 204-209.)

There is no need to elaborate upon the obvious fact that competition for industrial business is clear and direct. (Appellants' Br. 76, 192-193, 200.) The suggestion that the holder of a non-exclusive franchise may not enjoin illegal competition without showing that, but for the intervention of the illegal competitor, he could already have secured the business of each and every customer secured by the illegal competitor, is manifestly absurd and without support in any of the cases.

It is thus obvious that such cases as *Alabama Power Co. v. Ickes*, *supra*; *Duke Power Co. v. Greenwood County*, 302 U. S. 485; *United States v. Dern*, 68 F. (2d) 773; *Milwaukee Horse & Cow Commission Co. v. Hill*, 207 Wis. 420, have no application. There was no federal competition or direct invasion of the property or other rights of the complainants in those cases. Thus in the *Alabama* case the municipal competition was conceded to be lawful and the Court merely held that the relation between the alleged illegal action of PWA and the damage suffered by petitioner from the activities of PWA was too indirect and remote to be regarded as a proximate cause of the damage and hence to permit the examination of the validity of the PWA action.

F. APPELLEES' CONTENTION THAT APPELLANTS HAVE NO STANDING TO CHALLENGE THE VALIDITY OF THE REGULATION OF RETAIL RATES OF DISTRIBUTION OF TVA POWER AS AN INTEGRAL PART OF THE STATUTORY AND ADMINISTRATIVE SCHEME TO REGULATE LOCAL ELECTRIC RATES (INCLUDING THOSE OF APPELLANTS), IS UNSOUND.

The fact that the regulation of local electric rates, including those of appellants, is not only the natural and inevitable but also the intended effect of the statutory and administrative scheme and that the regulation of retail rates of TVA distributors is an integral and essential part of that statutory scheme has been shown at pages 163-175 of appellants' brief. Indeed, appellees now assert that, to the extent that TVA power is made available in the service areas of appellants, the fact that appellants' rates would be regulated is "a self-evident conclusion" so that no exclusion of evidence on that point could be error. (Appellees' Br. 224.) Appellees assert that appellants nevertheless can not be heard upon the authority of *Hines Trustees v. United States*, 263 U. S. 143, and *Sprunt & Son v. United States*, 281 U. S. 249. (Appellees' Br. 127-134.) The cases are plainly inapplicable. They dealt with a subject matter falling within the field of federal power. The orders of the Interstate Commerce Commission amounted to a mere consent to voluntary action by the railroads and such orders were in no way the proximate cause of any damage suffered by the complainants.

Here we have *affirmative action by the Government itself*, which includes (1) direct competition by the Government or full participation by the Government in, and control over, the retailing of the power (Appellants' Br. 201-9); and (2) a statutory and administrative scheme of which these contracts are an integral and essential part to regulate all local electric rates in the TVA area, including those of appellants. (Appellants' Br. 167-175.) Appellees further claim that this conceded regulation in fact is not

regulation in law, citing *Standard Scale Co. v. Farrell*, 249 U. S. 571; *Pennsylvania R. R. Co. v. Labor Board*, 261 U. S. 72; *United States v. Los Angeles R. R.*, 273 U. S. 299. (Appellees' Br. 154.) These cases are also plainly inapplicable. The situation in the case at bar is governed not by those cases but by the principle enunciated in *United States v. Butler*, 297 U. S. 1, 70-1, and *Frost v. Railroad Commission*, 271 U. S. 583, 593, as shown in appellants' main brief. (Appellants' Br. 170-174.)

V.

THE RULINGS OF THE TRIAL COURT ON MATTERS OF EVIDENCE AND PROCEDURE CONSTITUTE PREJUDICIAL ERROR. (Answering Appellees' Br. 192-260.)

The trial court's procedure in the conduct of the trial has already been discussed in part at pp. 5-6, *supra*. For the most part the contentions in appellees' brief relating to the trial court's rulings on evidence are directed to the claim that the exclusion of evidence was not prejudicial, and as to that claim no extended answer is required. Although appellees' brief contains a number of misstatements and misinterpretations, to avoid undue extension of the argument they are discussed only in so far as they affect the contentions made by appellees which we now consider.

1. The trial court's refusal to require production of TVA minutes and other documents. (Answering Appellees' Br. 201-7, 235-40.)

Appellees' brief undertakes to justify the trial court's refusal to issue any subpoenas for the production of TVA corporate minutes on the grounds (a) that the error, if any, was largely cured by the voluntary production of TVA con-

tracts and Board resolutions (Appellees' Br. 203); (b) that appellants had numerous other sources of information including reports and data submitted to Congress (Appellees' Br. 202, 197); and (c) that since the resolutions voluntarily produced embodied, according to appellees' contentions, the only official acts of the Board, the information upon which they were based and the considerations upon which such acts were taken would be *prima facie* incompetent and immaterial. (Appellees' Br. 204, 235-39.)

(a) The first of these claims, that *all resolutions* were furnished, is contrary to the record. The resolutions actually furnished merely show Board approval of contracts, expenditures and other like matters of a routine and formal character. (Comp. Exs. 516-627, R. 3357-3476.) That appellees never proposed or intended to furnish anything more than the material which is set forth in these exhibits, appears from the statements made by counsel following the court's ruling refusing appellants' application for the production of TVA minutes.

"Mr. Fly: May I add, your Honor, that it will be our attitude to enable complainants to get any and everything that pertains to the concrete facts which *we feel are within any bounds of reason, at issue here*, and we will be glad to confer with them to that end.

"Mr. R. T. Jackson: We will of course be glad to confer with counsel for defendants. We, of course, will not be willing to substitute their judgment for the judgment of the Court as to what is competent and relevant. . . .

"Mr. Fly: We are willing to give them the resolutions authorizing these contracts, and any other pertinent transactions of a concrete character. I cannot state with any degree of precision now, but I don't think there will be any difficulty on that.

"Judge Allen: It was the understanding of the Court that he offered, had offered to tender the resolutions enacted by the Authority. Was that not correct?"

"Mr. Fly: No, *your Honor*. We do not endeavor to turn over to them all of the resolutions on any and every subject, but as to any transaction which *could properly be brought in issue here*, yes, without limitation as to those resolutions. We can give you all of the resolutions authorizing the contracts, transmission lines, sales and construction contracts and everything of that type." (R. 766-7.)

For the trial court to condition the denial of its subpoena upon any such offer as set forth above amounts to a delegation of the trial court's judicial duties to the partisan and unreviewable judgment of adverse counsel. No authority is cited in appellees' brief in support of any such procedure and the prejudicial effect of it can best be judged by the unwillingness of the appellees to produce even its formal resolutions other than those which in appellees' view related to "*pertinent transactions of a concrete character*."

(b) Appellees' second contention is that appellants were not prejudiced because they had access to reports and data furnished to Congress. All appellees say by this argument is that appellants are not entitled either to controvert or supplement the statements which TVA has seen fit to make to Congress, but that appellees themselves are entitled to produce and use from their own official records any material of a self-serving nature which happens to serve their purposes in the present litigation,¹ even though such material controverts reports to Congress upon which they insist appellants are forced to rely.

¹ On August 25, 1933 TVA publicly announced its "Power Policy." (Comp. Ex. 633, excluded, R. 3487.) Such policy was set forth in the TVA Annual Report to Congress in December,

(c) While appellees contend that the TVA corporate minutes, other than the mere formal resolutions relating to authorizations of contracts and authorizations of construction work, are not shown to be prima facie relevant or material, they do not consider the showing made as to relevancy in the applications for subpoenas and accompanying statements (Comp. Exs. 1, 110, 111; R. 2441, 2643, 2660), but rely upon the contention that such minutes constitute "intradepartmental" discussions and reports¹ and therefore are prima facie inadmissible as a matter of law. This contention leads to the result that even as to resolutions concededly relevant and material, explanatory discussions which may be recorded in the minutes, showing the facts and considerations upon which the Board action was taken, are irrelevant and immaterial. In other words, a resolution authorizing the construction of a high tension transmission line with a voltage of 220 kv. to be operated for the present at 154 kv. (practically all "marketing" lines are designed for higher voltage than present operation) would be relevant, but any statements in the minutes showing that the larger capacity was recommended and approved

¹ Although none of appellants' assignments of error relate to the exclusion or production by subpoena of any "intradepartmental discussions, considerations, recommendations or reports" appellees have included in their brief a section so labelled (Appellees' Br. 235-9) and it is under that section that their discussion on this subject is found.

(Continued from page 113)

1934. (Comp. Ex. 113°, pp. 22-5.) Despite its refusal to require the production of TVA minutes, the trial court nevertheless received in evidence a certified copy of a resolution purporting to rescind the statement of the Power Policy. (Def. Ex. 29, R. 4061.) This claimed rescission had never been reported to Congress or otherwise publicly announced, and was introduced by TVA for the purpose of providing a colorable basis for Fdg. 215 (R. 647), prepared by TVA and adopted verbatim by a majority of the trial court.

to take care of certain prospective customers now served by appellants would be irrelevant.

Appellees offer no legal authority in support of this contention. So far as our examination of the cases has disclosed, it has never been applied in any suit against a private corporation and no principle of public policy justifies its application here.

“* * * The responsibility of officials to explain and to justify their acts is the chief safeguard against oppression and corruption. Whether it is the relations of the Treasury to the Stock Exchange, or the dealings of the Interior Department with government lands, the facts must constitutionally be demandable, sooner or later, on the floor of Congress. To concede to them a sacrosanct secrecy in a court of justice is to attribute to them a character which for other purposes is never maintained,—a character which appears to have been advanced only when it happens to have served the interest of some individual to obstruct investigation into facts which might fix him with a liability.” 5 *Wigmore on Evidence*, 2nd Ed. 1923 § 2378.

None of the arguments of appellees justify the court's ruling in denying the production of TVA corporate minutes either as they relate to the resolutions voluntarily produced as relevant by appellees themselves or as they relate to the pertinent subjects set forth in the subpoena which the trial court denied.

2. The trial court's ruling in excluding all official TVA press releases and published advertising. (Answering Appellees' Br. 208-216.)

Appellees contend that in so far as the official press releases set forth facts, there is no prejudicial error in their exclusion because the facts are otherwise in the record, and that in so far as the press releases relate to “expressions of policies” and possible plans, they are incompetent as lack-

ing any authoritative or probative value. (Appellees' Br. 208-9.)

The objection to evidence as cumulative presupposes two things—first, that the facts for which the evidence is offered are otherwise in evidence, and second, that the additional evidence is unnecessary because the facts in question are sufficiently established. Throughout their brief appellees repeatedly make the argument that excluded evidence was merely cumulative, without considering either of these fundamentals. In claiming that press releases were merely cumulative, appellees entirely ignore our discussion of them in appellants' main brief. As there pointed out, the press releases show among other things that TVA has pursued unfair methods of competition (pp. 224-25), that TVA refused to submit to State regulation of its power business (pp. 220, 82), that TVA proposes and intends to regulate local electric rates of other utilities including appellants (pp. 219, 81) and that the primary object and purpose of the TVA projects is the production of power (p. 219, Comp. Ex. 846, R. 3803, Comp. Ex. 879, R. 3867). Upon all of these issues the trial court either failed to make any finding or made findings adverse to appellants. It is a curious version of the rule of cumulative proof that where evidence is offered to establish a particular contention but is insufficient to convince the trial court, the exclusion of other competent evidence upon the same subject will not be considered prejudicial error.

The claim that the press releases have to do with the subject of motives, personal opinions and views is an unsupported assertion not borne out by an examination of the releases themselves. The scope of their subject matter is set forth in our main brief (p. 219, footnote p. 73) and is therefore not repeated here. As also pointed out in our main brief, these press releases were expressly authorized and approved and their distribution to the press was made

an official function of the corporation itself. Further, there can be no basis for the contention that repeatedly published statements relating to TVA's plans and objectives, coming from official sources and never publicly denied, have no probative or evidential value.

The same contentions considered above are also made in appellees' brief (p. 213) with reference to certain excluded advertising pamphlets and circulars. (Comp. Exs. 187°, 189, 190.) In addition to the claim that these exhibits were merely cumulative (a ground of objection now made for the first time and not mentioned by the trial court in its rulings), appellees assert that "no proof was offered to show that the Authority had any connection with the distribution of the circulars and pamphlets referred to." This latter contention cannot be taken seriously in view of the fact that their authenticity is conceded under the stipulation filed August 14, 1937 (R. 317) and in view of the fact that appellants offered and the trial court excluded evidence relating to their circulation and use by TVA. (R. 947, 1008-09.)

3. The several rulings of the trial court concerning various types of rate testimony. (Answering Appellees' Br. 221-229.)

The appellants offered various types of evidence involving the subject of rates. None of this evidence, however, required the court to consider the reasonableness of the rates of State-regulated utilities, and that issue is not presented here.

(a) The first type of evidence relating to rates mentioned in appellees' brief involved comparisons between TVA rates and appellant company rates in the various classes of service. (Assignment of Error 13, R. 720.) This evidence was offered to show the differential between TVA rates and the corresponding rates under State regulation,

and it was clearly material for the purpose of showing that the difference in rates is so substantial as imminently to threaten the complete loss of appellants' customers and the financial ruin of their businesses, as well as the extent of TVA's regulation of appellants' rates. Appellees argue that such proof was merely cumulative. The error in that argument has been pointed out in another connection, p. 116, *supra*. Appellees also contend that the trial court properly ruled in excluding this evidence upon the sole ground that it was multifarious. As pointed out in our main brief (p. 227, footnote), multifariousness is a ground of objection to the pleadings and not to the admissibility of evidence.

(b) A second type of evidence dealt with in appellees' brief involved the presentation of the economic factors in rate making which, irrespective of competition, compel substantial rate uniformity in any given territory and which, where actual competition exists, result in the securing of all of the business by the company offering the lower rates. (Assignment of Error 16, R. 720.) As stated to the trial court, this evidence was offered to show the regulatory effect of the method of disposal under the TVA power program. (R. 1413-14.) Appellees contend that the exclusion of this evidence was not prejudicial for the reason that where competition exists the effect of regulation is "merely a self-evident conclusion." (Appellees' Br. 224.) Since the trial court found that competition does exist between TVA and the appellants (Fdg. 125, R. 628) but wholly failed to find that there was any regulation of appellants' rates, the statement referred to seems to be merely an admission that the court erred rather than a valid argument that the exclusion of self-evident facts was not prejudicial.

(c) A third type of evidence relating to rates mentioned in appellees' brief is the excluded evidence of TVA subsidies. (Assignment of Error 14, R. 720.) Such evidence, discussed in our main brief (p. 79), showed that, assuming

the sale of all the power to be produced by TVA under the TVA Unified Plan at TVA rates, there will still be an annual operating deficit of more than \$9,000,000. As stated to the trial court, this proof was offered for the purpose of showing the violation of the TVA Act, as well as for the purposes which we have hereinabove discussed. (R. 1463-4.) With reference to this additional purpose, appellees call attention to Section 14 of the TVA Act (Appellees' Br. 226) which declares it to be the policy of the Act that—

"power shall be sold at rates which, in the opinion of the board, when applied to the normal capacity of the Authority's power facilities, will produce gross revenues in excess of the cost of production of said power."

The argument of appellees is that the language of the above provision vests unqualified discretion in the TVA Board, but even accepting this narrow interpretation which not only misconstrues Section 14 but also ignores other provisions of the Act, there must at least be some showing that the TVA Board actually exercised discretion in the establishment of its rates and that to the end specified in Section 14 itself. By stressing the significance of the qualifying phrase "in the opinion of the board" appellees merely emphasize the error of the court in refusing to require the production of the TVA minutes which could only establish that the TVA rates were adopted without any knowledge or consideration of costs. (Appellants' Br. 71.) Appellees' further contention that it would not be a violation of the TVA Act for the Board to give away all of the electric power now being generated or which may in the future be generated is manifestly absurd.

4. The rulings of the trial court in excluding rebuttal evidence. (Answering Appellees' Br. 254-260.)

Appellees do not attempt to justify the grounds upon which substantially all rebuttal evidence offered by ap-

pellants was excluded by the trial court, namely, that it involved matters of opinion or of mixed fact and opinion on the part of the rebuttal witnesses and was therefore inadmissible as rebuttal evidence. They now rely upon the contention that all of the rebuttal evidence which was excluded related to matters which were a part of appellants' case in chief, and as a basis for that contention undertake to show that the evidence sought to be rebutted was related to certain general issues upon which evidence had been offered as a part of appellants' main case. Any such rule would effectively bar the introduction of any rebuttal proof except in a suit where affirmative defenses had been made, would substantially limit the function of cross examination, and, as pointed out in our main brief (pp. 243-246), would deprive the complainants in this case of the opportunity (which was afforded to the defendants) of showing any errors of fact and errors of assumption in their opponents' case. The claim that any such limitations, as applied to rebuttal evidence, come within the discretion of the trial court is plainly erroneous.

5. The rulings of the trial court on other matters of evidence and procedure. (Answering Appellees' Br. 212-21, 229-33, 234-5, 240-254.)

(a) *Conspiracy and cooperation with PWA and other federal agencies.* (Answering Appellees' Br. 216-21.) Appellees' contention that evidence on this subject was properly excluded and subpoenas properly denied because such evidence involved the activities of agencies not parties to the case, operating under valid statutes, entirely ignores appellants' main brief (pp. 233-5) and the significance of the evidence sought to be introduced. The financial assistance which has been and is being rendered by PWA and REA represents a concert of action to promote the un-

lawful objectives of TVA and directly bears upon the imminency of their fruition.

With reference to the propriety of the court's refusal to allow appellants to take the deposition of Harold L. Ickes, the claim that appellants had every reasonable opportunity to take that deposition is contrary to fact (R. 344); the claim that the evidence sought from Administrator Ickes was immaterial and irrelevant is manifestly erroneous as appears from a mere reading of the proposed testimony (R. 364); and the fact that the deposition of a subordinate was taken obviously does not cure the error.

(b) *TVA solicitation by press releases.* (Answering Appellees' Br. 212-16.) Appellees devote an entire section of their brief to the claimed cumulative character and irrelevancy of press releases as constituting solicitation of appellants' present customers. The attempted application of the rule of cumulative evidence completely overlooks the effect of *repeated* publication of TVA rates and activities; and the entire burden of the argument concerning the relevancy of the press releases is that instances of solicitation of individual customers are relevant, but that, for reasons not explained, wholesale solicitation of all of the consumers in the area through continuous advertising and publicity is irrelevant and immaterial.

(c) *Flood damages resulting from TVA power dams.* (Answering Appellees' Br. 243-4.) The trial court excluded as irrelevant and immaterial evidence that the average annual value of farm crops on the land which will be flooded by TVA upon the completion of only four of the TVA dams now under construction amounts to far more than the average flood damage in the entire Tennessee River basin. (Appellants' Br. 126-127.) Appellees seek to justify the exclusion of this evidence upon the ground that it calls for a comparison of the detailed costs of the TVA projects

with the benefits to be derived from one particular function. Since the testimony was offered for the purpose, as was clearly stated to the trial court (R. 1245), of showing the absence of merit in the claim that the TVA power dams have for their purpose, except as a pretext, the prevention of damage from floods, it is clear that appellees' attempted justification of the court's exclusion of this evidence is without substance.

(d) All other assignments of error relating to rulings on evidence and procedure are, we think, sufficiently covered in our main brief, to which we refer without further discussion.

Respectfully submitted,

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